RADIO-PERCEPTION

THE JOURNAL OF THE
BRITISH SOCIETY OF DOWSERS

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BRITISH SOCIETY OF DOWSERS

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JOURNAL OF THE
BRITISH SOCIETY OF DOWSERS

Vol. XII No. 85 September, 1954

NOTICES

Members are reminded that subscriptions for the year July 1st, 1954, to June 30th, 1955, were due on the former date.

* * * *

Messrs. Noel Macbeth, Martin Parkinson, D.O., D.Psy., and Egerton Sykes have been elected British Representatives on the Standing Committee of the International Radiesthesia Congress Association, following the Congress held last May in Paris, which was attended by 560 people from 17 countries. There is to be a similar international congress in Switzerland during the summer of 1956. Mr. Macbeth (Stock, Essex) would like Secretaries of all Study Groups or larger Radiesthesia Associations of English-speaking countries to write with a view to forming a liaison Committee of English-speaking associations, which would receive English translations of communications sent out from the Paris Standing Committee. It is unlikely that this liaison Committee would have to meet more than once or twice each year in London.

* * * *

Books published by the Society are :
Dowsing, by W. H. Trinder, 10/- (7/6 to members)
Radiations, by T. Bedford Franklin, M.A., F.R.S.E., 8/6
A Radiesthetic Approach to Health and Homeopathy, or Health and the Pendulum, by V. D. Wethered, 10/6 (8/6 to members)

* * * *

The title page and contents of Volume XI of *Radio-Perception* can be obtained gratis from the Editor on application.

* * * *

The following periodicals are received by the Society in exchange for *Radio-Perception* and can be borrowed from the library :—

Health and Life
Journal of the Society for Psychical Research
The Pendulum
Atlantis
Prediction
La Radiesthésie Internationale
La Radiesthésie pour Tous
Santé d'Abord
Les Amis de la Radiesthésie
R G S (Swiss journal in German)
Zeitschrift für Radiästhesie

Contributions for the *Journal*, preferably in typescript, should be sent to the Editor at least five weeks before the first day of March, June, September and December, if they are to appear in the respective *Journals* for those months.

* * * *

The price of new *Journals* to members, in excess of the free number, and of back numbers, is 2/- and 1/6 respectibely.

Six free copies of the *Journal* will be given, on request, to writers of articles in it, in addition to the usual copy.

* * * *

The Society's badges can be obtained from the Honorary Secretary for 1/3 post free.

* * * *

Communications for the Editor, and inquiries, should be sent to Colonel A. H. Bell, York house, Portugal Street, London, W.C.2.

We much regret to record the death of Mr. O. F. Parker, A.R.S.M., M.A., F.S.A., on June 26th, after many months of ill-health. He had been a member of the Society for many years and a member of the Council since 1944. He took a keen interest in the Society's objects and was always ready to place his knowledge of mining, geology, and archaeology at its disposal. He had a most likeable disposition, and his presence at our meetings will be badly missed.

SUMMER MEETING, 1954

For once the weather on this occasion was unkind, for Saturday, July 17th, proved to be one of the wettest days in a wet summer. It had been proposed to meet at the Abergavenny Arms Hotel at Frant, a charming unspoilt village about two miles south of Tunbridge Wells, and to exploit Eridge Park for dowsing objectives. As a certain amount of walking would have been involved only 22 tickets had been applied for. In spite of the weather 12 members attended, amongst them being Major Pogson who, it is good to record, has so far recovered from his terrible accident last December that he can now get about with the help of a stick, and drive a car. Wind and rain made any outside dowsing impossible, but a few of us visited the local flower show and then went to cover in the hotel where the time till tea was passed in talk and in a successful hunt by Mr. Kilgour for a gold ring which had been concealed by Major Pogson.

We must hope for summer weather next year.

SOME REFLECTIONS ON THE PARIS CONGRESS, 1954

BY THOMAS G. DUMMER, N.D., D.O., M.B.N.A., G.R.R.M., F.N.P.S.R.

In writing this report I shall try to recall my general impressions rather than attempt to deal, except very briefly, with the mass of diverse and original subject matter as given by the various speakers. Indeed it would be beyond the scope of this article to do otherwise, owing to the formidable quantity of material that was presented. Also since I understand the main context of the most interesting contributions will be ably reviewed elsewhere.

One must congratulate the organising committee on their choice of venue. What could have been better than the impressive Hotel Lutetia both for its ready accessibility, and the surrounding charm so typical of the Left Bank districts of Paris.

On arriving in the Cariatides Hall I was immediately struck by the atmosphere of subdued excitement and expectation and above all " ambiance " so typical of all French gatherings. On completing the formalities of registration, delegates were all in turn presented with their Congressional Badges, together with the three formidable volumes of the " Rapports," so excellently arranged and duplicated, dealing with the subject matter which was to be given later. I was particularly impressed by the foresight of the committee in this respect, particularly from the point of view of a visiting " foreigner," but nevertheless I subsequently heard a considerable amount of criticism of the idea by other delegates who thought it rather pointless to tediously have to listen (as it was put) to material that was already in print. For my part I felt that such a complexity of verbiage, concentrated into such a short space of time, could surely be much more readily assessed and digested in quiet reflection and over a period of time. From another point of view, however, the arrangement seemed to make for what was often an inattentive audience since many obviously preferred the idea of reading their reports afterwards and during the lectures engaged in friendly and often boisterous discussions and private demonstrations at the side of the hall around the tables where the apparatus was on view ! This, of course, tended to cause much annoyance both to speakers and all others concerned. In view of this I could not but help thinking that many congressists would have preferred a less formal procedure and more opportunity for informal fraternisation. However, when one considers the magnitude of the task which confronted the organisers these were really but minor criticisms of what was, on the whole, a very well organised affair.

On the morning of Thursday, 20th May, before a hall packed with eager and impatient Congressists on the magnificent stage

with a background of flags and banners, which gave the impression of a miniature United Nations Assembly, sat the " Bureau du Congrès "—Messrs. A. Lambert, G. Discry, de Barberie, V. Mertens, Monsieur Marc Brivet, President of the " Groupement pour la Reconnaissance de la Radiesthésie Médicale," and my very dear friend Monsieur Maurice Duval, President of the " Fédération de Puisatiers, Sourciers and Radiesthésistes de France and Pays d'Outre-Mer " and, of course, under the able Chairmanship of the President of the Congress, Monsieur Gabriel Lesourd. The proceedings then commenced by paying homage in silence to the memory of the Abbé Mermet and the late Dr. Peyré, followed by the President's (M. Lesourd) speech of welcome, the following being the main points he covered :—

" During the course of the Congress we shall try to speak the truth frankly as it is, whether it be disagreeable or agreeable. I believe in the reality and practical value in application of the radiesthetic phenomena. Let us first congratulate all members of the various committees, both consultative and legal, etc., and in particular our Treasurer, Monsieur Hector Mellin, together with Michel Moine and all the members of the Press, present or absent, who have for a very long time now rigorously defended and also at the same time advanced the knowledge of radiesthesia amongst their readers, whose efforts I feel are symbolised in the name of Pierre Neuville and all those of you who have given us so much encouragement and who are intent in bringing about both a world and national (French) organisation of Radiesthesists. There are here to-day representatives of 15 Nations : Germany, Great Britain, Austria, Belgium, Canada, Chili, Spain, Greece, Italy, Luxembourg, Monaco, Portugal, Switzerland, Syria and Uruguay—let us give them a hearty welcome and the expression of thanks for coming."

M. Lesourd then went on to state the prime object of the Congress, that being to try and bring about a union of all Radiesthesists everywhere, and then concluded with these words :—

" I declare open the Congress of Radiesthesia 1954."

The number of delegates present, I understand, far exceeded expectations and totalled the successful number of 557 and included with few exceptions almost every notable personality in the world of Radiesthesia.

The following is a brief résumé of the more important points made by the various speakers.

M. Alfred Lambert made a plea for a standardisation of terminology in Radiesthesia and presented his suggested " lexicon " to that end.

Madame Azam (Toulouse) gave her support here with a further plea for a unification of methods, language, tuition, examination standards, etc.

Madame Maury described her apparatus, " The Panorgone," previously demonstrated in London (1950) at the Congress of Radionics and Radiesthesia.

Monsieur Béasse felt that if Radiesthesia was going to get any recognition from official sides (especially from the Faculty of Medicine) that it was necessary to make the approach much more objective and that he considered the " Physical " method of Radiesthesia with its more scientific approach as the only one likely to make any direct appeal. He rather deplored the tendency of Radiesthesia toward mysticism, etc., and felt that such an approach invited much unnecessary criticism and gave much ammunition to the adversaries of Radiesthesia.

Much discussion followed over the hoary question of the true nature of Radiesthetic phenomena—is it primarily mental or physical ? Varying points of view were offered by Madame Maury, Monsieur de Barberie, Colonel le Gall, Monsieur Mertens de Wilmars, Monsieur Meier (Luxembourg—octogenarian and still obviously full of Radiesthetic energy !) and Monsieur Henry de France, and many other notable speakers. Monsieur Lesourd wound up by saying that he considered the Radiesthetic phenomena as being " a means of obtaining information in which two factors are operative, both together and acting instantaneously the one being called ' physical ' and the other ' psychic '—man being but a living electro-magnetic field."

Monsieur Disery spoke of the necessity of a real grounding in Geophysics before attempting water-divining. The numbers of unadmitted failures amongst Dowsers were an obstacle to discovering the causes of the failures. " We tend to hear only of the successes," he said. The art of water-divining is not a thing that can be acquired in a day or a week. He terminated with this final admonishment—" In the interests of all Radiesthetists I say to you ' Don't play about with water, it can be worse than playing with fire ! ' "

An interesting contribution came from Monsieur Georges Gauthier in which he offered the hypothesis of " Cybernetics " postulated some years ago by the American mathematician Norbert Wiener as an explanation of the rationale of Radiesthesia, and so on, and so on.

Whilst the writer feels that the foregoing contributions were probably the most representative there were, nevertheless, many other interesting and original points of view and he therefore apologises to all others concerned if not mentioned for the omissions which are solely due to the dictates of time and printing space.

A word regarding the apparatus on view. This was, frankly, a very disappointing display, for apart from the several " novelties," for example Jean Auscher's " Telekinesiometre " and " Scripto-Pendule," the " Frequency Selector " of Père Honore, the D. Chicca " Detecteur R.S.R." and the " Automatic Pendulum " of

Ehny (which functions without manual operation, presumably in the presence of the operator—food for thought ! ! !) there was hardly anything that could really be deemed new or superior to existing apparatus.

The high spot of the Congress was, of course, the reception at the Hotel de Ville and the cordial welcome given to the foreign and French delegations by Monsieur Dupont, President of the Municipal Council of Paris. In a very understanding and sympathetic speech he promised his official support to all efforts of the Congress and wished it a happy and prosperous end. Monsieur Lesourd spoke in reply (seconded by Monsieur Lambert) in appreciation of the sentiments expressed by Monsieur Dupont and finally, with a very gracious smile, Monsieur Dupont accepted from him " le pendule d'honneur," presented on behalf of the Congress. Champagne and a conducted tour of the Hotel de Ville terminated these very pleasant and interesting proceedings.

The social aspects of the Congress were well catered for in the shape of the closing banquet with all the usual trimmings and excursions to Versailles and Chatillon-Coligny (the site of an ancient Gallic-Roman city complete with remains of the arena, baths and Temple of the Source) and also a visit to the ruins of the Château Chatillon-Coligny.

Saturday morning was spent in discussion of the legal and political aspects, together with the drawing up of a framework of organisation, marred unfortunately by a certain amount of partisanship which from a " foreigner's " point of view seemed in very bad taste and rather on the level of " parish-politics," which tended to be quite incongruous in relation to the spirit of the previous day's proceedings. However, making due consideration for Gallic individuality and temperament, it was probably all of much less consequence than it appeared at the time.

Now for the final question—Was the Congress a success ? Were all the aims and objects realised ? I would say without hesitation—" Yes." In spite of the individuality of the various personalities and the diverseness of the various points of view an essential unity has come through it all and will, I am sure, prevail in all the tasks of implementation that lie ahead.

A solid National Committee has been formed of all Associations in France, an International Organisation is in process of formation, a legal body has been set up to press for legislation favourable to Radiesthesia (firstly a demand for a " statut " will be presented to the French Parliament), a technical and research committee is envisaged, and lastly but certainly not the least important, an International Press Association of Radiesthesia has been set up—created through the initiative of that dynamic personality and organiser Monsieur Michel Moine. Dare I ask where Great Britain is going to fit in with all this action ? May I make a plea for the possibility of having our own National Committee ?

PART ONE

HUMAN SENSITIVITY TO ELECTRIC FIELDS

BY J. E. AMOORE, B.A.

Introduction

While investigating the physiology of dowsing, the author discovered that the human body is remarkably sensitive to a moving electric field. This may be readily demonstrated by means of a vulcanite rod which has been previously electrified by rubbing with flannel. When the rod is moved to and fro an inch above the back of the hand, it causes a distinct pricking sensation in the skin, rather like "pins and needles." There seem to be only three possible mechanisms by which this effect could be produced. It might be ascribed to sparks jumping to the skin, to bending of the hairs by electrostatic attraction, or to currents induced in the skin by the moving field. However, sparking does not occur across so wide an air gap, and the feeling is quite different from that produced by brushing the hairs with a pencil. The sensation must therefore be caused by electric currents induced in the skin by the movements of the electrified rod. Furthermore, with a highly charged rod, it may be observed that the pricking sensation is accompanied by a visible outburst of perspiration on the palm, which begins to feel clammy in consequence. Now mechanical disturbance of the hairs and skin does not cause palmar sweating, unless the manipulation is so vigorous as to be painful. This very reservation, however, provides the clue to the phenomenon. It suggests the possibility that the pricking is caused by electrical excitation of the pain receptors, which leads to reflex sweating on the palm. Accordingly the following experiments were designed to test the sensitivity of the hand to controlled electric fields derived from a battery. Palmar sweating too slight to be visible was demonstrated by observing the associated increase in the electrical conductivity of the skin.

Experimental

The electric field was formed between two brass discs, 5 cm. in diameter, placed co-axially 30 cm. apart. They were connected to a 100 megohm potentiometer, supplied by a 300 volt battery. The potentiometer, which consisted of a series of 10 MΩ resistors, gave a choice of ten field strengths. An additional 10 MΩ resistor was put in series with the electrodes, for safety. By means of a commutating switch, the field could be suddenly reversed.

The electrical conductivity of the palmar skin was observed continuously. A pair of cylindrical electrodes, 3.5 cm. in diameter and 4.5 cm. long, were made from brass gauze, and

mounted co-axially on opposite sides of a small piece of wood. They were grasped firmly in one hand, with two fingers around each cylinder. The electrodes were connected in series with a micro-ammeter having a range of 200 μA and a 300 Ω potentiometer using a 4.5 V battery. The resting current was adjusted to about 70 μA.

During the experiments, care was taken to avoid any extraneous sensory or emotional stimuli which might cause palmar sweating. The tranquility of the subject was confirmed by watching the resting current, which should remain steady. The room was kept at a comfortable temperature, because the sweat glands became sluggish if the hands were chilly. Their responsiveness was occasionally tested by rapping the thigh smartly with the edge of a ruler, which was painful enough to cause slight palmar sweating, and a consequent brief increase in the current.

Results

The subject in the following experiments was the author. A potential difference of 150 V was applied to the stimulating electrodes. When the hand was moved back and forth in the field between the electrodes, a tingling sensation was experienced in the skin. This became especially marked if the back of the hand was moved around close to one of the discs. With a larger P.D. of 300 V, the sensation developed into a sharp pricking. If the hand was held motionless, the feeling disappeared completely, but reversing the field caused a brief outburst of acute pricking. When these experiments were repeated, with the hand holding the skin conductivity electrodes, a considerable degree of palmar sweating was demonstrated. The current often increased to double the resting value.

With a smaller P.D. of 60 V, no cutaneous sensation could be detected. Nevertheless, the micro-ammeter in the skin conductivity circuit still showed marked deflections, particularly upon reversing the field. The current began to increase about two seconds after the field reversal, and rose some 20 per cent. above the resting value. Slight increases in conductivity were observed with a P.D. of 30 V, but no attempt was made to find the lower limit of the effective field strength.

Discussion

These results clarified the findings with the vulcanite rod, because the fields employed were far too weak to cause sparking, or even to bend the hairs. It is noteworthy that an electric potential gradient was not by itself an adequate stimulus. For sensations and responses to be produced, it was essential that the field strength should be changing. This was achieved in the above experiments either by moving the hand in the inhomogeneous field, or by reversing the field. The necessity for changing

field strength suggests that the effective stimulus is actually an induced current. The assumption that the sensation is caused by electrical stimulation of the pain receptors is supported by the work of Bishop(1). He placed a fine wire electrode in contact with the surface of the skin, and delivered spark discharges of increasing strength from a variable condenser. He found that the pain receptors exhibit a lower electrical threshold than any other type of receptor in the skin. This rule applies to all surfaces of the hand and arm, except the balls of the fingers, where touch has a lower threshold than pain. He stated that weak shocks applied to a pain spot elicit a tactile experience accompanied by a faint aura of itch, and that stronger shocks produce a stinging or pricking sensation. Thus there is a close resemblance between the sensations described by Bishop, and those experienced by the author. It must be concluded that the pain receptors in the skin may indeed be stimulated by electric currents induced by a changing electric field. The sensitivity of these receptors to electricity appears to be much higher than has previously been suspected, for the induced currents are very minute.

It has long been known that painful cutaneous stimuli cause, after a reaction time of about two seconds, a reflex decrease in the palmar skin resistance. The physiology of the response has been worked out by Carmichael, Honeyman, Kolb and Stewart (2). They showed that an electric shock applied anywhere on the body causes vasoconstrictor and sudomotor reflexes, which are particularly noticeable on the palm. They proved that both responses cause a diminution of the electrical resistance of the skin. Hence the above skin conductivity circuit should be regarded as demonstrating both vasoconstriction and sweating rather than sweating alone. The reaction time of the skin resistance response to an electric field reversal is evidently much the same as that to an electric shock.

In assessing the significance of the present experiment, it should be realised that it represents a special case of the generalisation which it suggested, that pain receptors may be activated by induced currents. Many physical causes might induce currents in the skin, and there are numerous physiological responses to pain. Accordingly the following generalisations are submitted as working hypotheses :—

1. Any influence which causes electric currents to flow in the skin may stimulate pain receptors.

2. All skeletal and autonomic motor reflexes associated with pain are possible responses.

The most important fact revealed by the present experiment is that an electric field, below a certain intensity, is capable of activating the pain receptors sufficiently to initiate a sudometer reflex, without producing a sensation powerful enough to arouse conscious perception. Thus the subject remained unaware that

such subliminal stimuli had been received, yet demonstrable physiological responses occurred. Since the author is primarily concerned with subliminal pain stimuli of an electrical nature, the concept is submitted in the form of a third working hypothesis :—

3. Weak electrical stimuli may elicit responses to pain without being consciously perceived.

The physiological basis of dowsing

The above investigation was conducted as part of an attempt to find a physiological basis for the phenomenon of dowsing. However, while the work was in progress, it was learned that Tromp (4) had already made a very interesting study of the influences to which dowsers may respond. He developed his postulate that dowsers might be sensitive to small irregularities in the surrounding natural electric or magnetic fields. He pointed out that the fields of atmospheric electricity and terrestrial magnetism are rather inhomogeneous, on account of the distortions introduced by topographical and geological features, vegetation and the constructional works of mankind. Accordingly he tested certain dowsers with a weak artificial magnetic field, whose intensity could be varied without the subject's knowledge. He demonstrated repeatedly that dowsers are in fact sensitive to changes of magnetic field strength in their vicinity. They responded with muscular reactions which were too slight to be observed directly, but which were easily demonstrated by means of the traditional forked or curved dowsing-rod, which the dowser holds between his outstretched hands. This simple device magnifies the response, showing a marked deflection either upward or downward. An alternative indicator, which was even more responsive, consisted of a swinging pendulum suspended from the hand, the plane of oscillation changing upon receipt of the stimulus. He also showed by means of a string galvanometer connected to electrodes attached to the wrists, that the changing field caused considerable fluctuations of skin potential. In addition to magnetic fields, he made some use of electric fields, and obtained similar responses. It is important to note that the same reactions were exhibited by the majority of ordinary subjects, dowsers being distinguished only by their greater sensitivity.

Tromp emphasised that the irregularities occurring in the natural fields are of comparable magnitude to the variations of field strength which he found adequate to stimulate dowsers. He suggested that the responses were caused by electric currents induced in the skin by the changing field strength. The currents were supposed to stimulate sensory nerve endings in the skin, but he was unable to specify the receptors involved, presumably because he never used fields sufficiently powerful to produce an

identifiable sensation. He regarded both the muscular reactions and fluctuations of skin potential as subconscious reflexes, but he did not discuss their physiology.

With the three hypotheses presented above as a guide, it is possible to be rather more definite about the physiological mechanism underlying Tromp's invaluable observations. The changing fields he employed were indeed inducing electric currents in the skin, which stimulated the pain receptors, apparently without giving rise to any conscious sensation. The muscular reactions were complicated by the additional tensions introduced by the rod or pendulum, but they probably represent a distorted form of the flexo reflexes which normally affect withdrawal from painful stimuli. The fluctuations of skin potential have a multiple origin, but it appears from the work of Patton (3) upon the cat's footpad, that they are mainly due to the sweat glands, which become more active in response to pain.

It may therefore be concluded that the dowser's craft depends upon the electrical sensitivity of the cutaneous pain receptors. Furthermore, the phenomenon may be readily investigated by the methods of experimental physiology.

Summary

1. A Changing electric field, if sufficiently strong, causes a pricking sensation in the skin, which may be accompanied by the appearance of perspiration on the palm.

2. The sensation is probably due to stimulation of the cutaneous pain receptors by an induced electric current.

3. The palmar sweating is one of the normal responses to painful stimuli.

4. The sudomotor responses to a controlled electric field were observed by measuring the accompanying increases in skin conductivity.

5. A weak electric field elicited an increase in skin conductivity without arousing conscious sensation.

6. It is suggested that these findings demonstrate a physiological basis for the phenomenon of dowsing.

References

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(2). Carmichael, E. A., Honeyman, W. M., Kolb, L. C., and Stewart, W. K. A physiological study of the skin resistance response in man. *Journal of Physiology*, 1941, **99**, 329-337.

(3). Patton, H. D. Secretory innervation of the cat's footpad. *Journal of Neurophysiology*, 1948, **11**, 217-227.

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ARE A DOWSER'S REACTIONS ATTRIBUTABLE TO CHANGES IN POTENTIAL

BY LT.-COLONEL C. D. A. FENWICK

A Lecture delivered to the British Society of Dowsers on June 16th, 1954.

Introducing the lecturer the Chairman said :

Our lecturer this afternoon, Lieut.-Colonel C. D. A. Fenwick, is a retired officer of the Royal Engineers who has had much experience as a practical dowser, and it is just over five years since he gave us an address on some of his experiences in field and map dowsing.

Like many of us, he is keenly interested in finding an explanation of the dowsing reactions, and I am sure that we all welcome any ideas which will help to a solution of that baffling problem.

Mr. Chairman, Ladies and Gentlemen,

I think all of you will agree that before we can expect greater practical use to be made of the art of dowsing we must be able to give a reasonable explanation of the underlying principles governing a dowser's muscular reactions. After all, it is only natural that before risking his money on a venture a prospective client should require more than just the bare statement that " it works " and a reference to past successes. For instance, a friend of mine who is engaged in research work on behalf of the Ministry of Fuel wrote last year to the effect that if only I could produce a scientific explanation that would make dowsing " respectable " he could probably get permission to employ a skilled dowser to assist in his investigations.

Shortly after this I happened to read an article in the *Electrical Review** which gave a brief description of some recent discoveries resulting from research into the electrical activity of the human body that was being carried out as part of a long-term medical project in the United States. It struck me that some of these might provide a clue to the problem posed by my friend. Incidentally, these investigations indicated that there is some scientific justification for the belief that certain forms of lunacy are actually dependent on the phases of the moon. I am not suggesting that dowsers are lunatics, though some people seem to think we are ; I merely quote it to show what unexpected discoveries can result from electro-physiological research.

After reading up what I could on the subject I sorted out my ideas into a rough theory and tackled various friends and relations, both dowsers and non-dowsers. All were most encouraging and helpful and one offered to put me in touch with the Burden Neurological Institute where he hoped I might get expert advice and assistance in investigating the problem. However, we had no luck. Eventually Dr. Grey Walter, who is in charge of the

* " Bio-electric and Lunar Phenomena," by L. R. C. Haward, M.A., B.Sc. '*Electrical Review*,' Vol. 153, No. 5, 31st July, 1953.

research work there, wrote to say that they had made some experiments with dowsers some time ago and these showed that there was no relation between the dowser's physiological functions and the situation he found himself in. He admitted that one cannot deny the possibility in this field where so little is understood and expressed the hope that I would be able to clear up some of the difficulties but regretted that they were unable to help at this stage.

I am, therefore, unable to bring forward as much evidence in support of my theory as I had hoped. However, I feel that it would be possible to test its validity experimentally, given the necessary research facilities and technical knowledge, neither of which I possess. As no one wants to squander money on unproductive experiments, my immediate object is to try and show that I am not merely chasing a will-o'-the-wisp but really have stumbled on a clue that is worth investigating in the hope of finding someone prepared to assist in following it up.

I do not pretend to have discovered anything new. I have merely sifted the results of other people's work and tried to set out what appeared to me to be relevant to the problem in an orderly manner. My only qualification is many years' experience in guiding and supervising applied research and development. I am not an expert in any subject and therefore liable to be shot down by those who are. My only hope of escape is if I have been lucky enough to " recognise the unexpected " as Sir Edward Appleton put it recently.

My theory is based on the fact that muscles can be activated by an electric current. It has been known for many years that, if anyone grasps a live electric conductor for instance, and earths it by accident his hand and arm muscles tend to contract and, in extreme cases where the potential difference is great enough, the unfortunate victim cannot let go. During the last ten years or so electro-physiological research has shown that muscular movement of any kind is effected by means of electrical impulses which travel along the nerves, via the appropriate nerve centres in the brain, to activate the muscles concerned. This self-generated current is very small and I shall endeavour to show that a dowser's muscular reaction can result from the effect on his nervous system of relatively small changes in the electric potential of his surroundings.

According to the article in the *Electrical Review* that I referred to earlier on, the medical research teams have discovered that the potential difference between the skin of the head and that of some lower part of the body fluctuates within the range plus 18 millivolts to minus 7 millivolts for normally healthy people. Furthermore, this variation occurs in regular 14-day cycles, i.e., 28 days from peak to peak and is accompanied by observable changes in personality. For instance, when the potential difference is

negative people are depressed but become correspondingly more cheerful and energetic as it rises towards the positive peak. This behaviour tends to become exaggerated should an individual's potential difference rise above or fall below his normal, giving rise to violent conduct and exhibitions of temper at the upper end of the scale and sullen morose fits at the lower end. Incidentally, it was also found that mental patients had a much higher potential than that of normal people, from which it was implied that the wider the range of fluctuation the more unstable the personality and vice versa.

Now various experiments have been carried out regarding changes in the skin potentials of dowsers. Those described by Dr. S. W. Tromp in his book *Psychical Physics* show that changes occur in a dowser's skin potential not only as he passes through a natural dowsing zone, but also as he passes through an artificial magnetic field. A further series of experiments to verify those of Dr. Tromp are mentioned in the last (March, 1954) number of the *B.S.D.J.* These show that changes in skin potential of the order of 100 to 200 millivolts were recorded when a dowser experienced a reaction as he passed over a water vein. When we compare this figure with the natural variation of about 25 millivolts spread over a period of 14 days it is hardly surprising that the physiologist of the team should consider that such changes "appear to indicate an extraordinary deviation from the usual."

It seems reasonable to assume from this that, if variations in skin potential of less than 25 millivolts can affect the nervous system sufficiently to give rise to observable changes in personality, then variations of upwards of 100 millivolts could affect the neuromuscular portion sufficiently for a trained dowser to experience a reaction. It would be interesting to know what is the minimum change necessary to produce a reaction as the maximum recorded for non-dowsers was 10 millivolts and for the rest, other than the two star performers, was 30 millivolts.

If this assumption is correct, the problem is to discover the process by which the necessary change in a dowser's skin potential is brought about. Now success in applied research is dependent on being able to control the variables and anyone who has ever skimmed through Dr. Tromp's learned and monumental book will realise what a tremendous number of variables are involved. Not only are there several possible causes of changes in skin potential, but no two human beings are exactly alike and dowsers do not all react in the same way. Furthermore, all living organisms seem to be affected in various ways by dowsing zones.

Faced with such a formidable array I felt that the only hope of finding a short cut to a solution lay in studying the possible effects of whatever constants there might be. In this way I hoped to be able to reduce the number of variables to be considered to manageable proportions.

There are two factors common to all dowsing operations in the field which can, I think, give us a clue. The first is that a dowser is never completely insulated from the air, which is always in contact with some portion of his skin; the other is that a reaction is always preceded by movement of some portion of his body.

As I have already pointed out, we know that when the skin comes into contact with an electrically charged object a current can flow between them and under certain conditions this can activate the muscles. Given suitable conditions, therefore, it should be possible for an electric current to flow between the air and a dowser's skin when the two are at a different potential. Alternatively a current can be caused to flow through his body as a result of movement in a potential gradient. The human body is a semi-conductor of electricity and it is well known that the movement of any electrical conductor relative to a potential gradient will cause a current to flow along it, and at the same time alter its surface potential, until a condition of stability is reached. It seems inevitable in either case that this flow of current will be bound to upset the normal electrical activity of his body and give rise to physiological changes of some kind.

This implies that a change in the dowser's skin potential indicates a change in the atmospheric potential at that point. From which it follows that every dowsing zone is associated with a change in atmospheric potential which may take the form of a potential gradient. Can we show that this is in fact the case?

Let us consider the most usual, the geological case. The difference in potential that exists between the air (positive) and the earth (negative) varies from place to place and this variation may be due to changes in the underlying geological structure among other causes. Anyone passing above, say, an underground stream, a dry fissure, a mineral lode, etc., would, therefore, encounter a change in the atmospheric potential and in all probability would move through a potential gradient as he crossed the feature. Similarly, anyone passing through a magnetic field, as in Dr. Tromp's experiment, would be moving through a potential gradient.

According to Dr. Grey Walter in his book, *The Living Brain*, all living tissue generates small voltages which change dramatically when the tissue is injured. The dowser who locates, say, the position of an internal tumour, is again registering the existence of a potential difference, between the sound and injured tissue. At least that seems a reasonable explanation to my mind.

At this point I should like to quote another of the discoveries mentioned in the *Electrical Review* which I think has a bearing on our problem. It also tends to corroborate the belief widely held among dowsers that certain types of dowsing zone affect all

forms of life—human, animal and vegetable. According to the author of the article, electrodes were attached to animals of various types and also implanted into the trunks of healthy trees in order to ascertain whether results could be obtained that were comparable with those found to exist with humans. This proved to be the case to the extent that readings taken between the electrodes showed the same cyclic variations in potential difference as between those attached to humans, and all records showed the same phase, i.e., all reached their peaks at the same time. The article did not, however, give the maximum and minimum figures for comparison with the normal human range of plus 18 to minus 7 millivolts.

I think it was this fact—that all forms of life are liable to be adversely affected by abnormalities of skin potential—that attracted my attention, having had personal experience of the effects on humans and trees of the so-called "noxious rays" (*raies nocives*) which certain dowsing zones are reputed to give off. In the house I left about three years ago we found that everyone, from three years old to eighty, who spent more than a night or two in certain rooms was affected by most noticeable fits of depression, nerves and insomnia. It is significant that these effects correspond very closely to those produced by abnormal skin potentials as reported by the medical research teams. I also had trouble with fruit trees in one part of my garden. For instance, soon after moving in I planted three plum trees, two Czars and a Victoria, in a line. The Czar at one end of the line grew on without a check but the Czar at the other end and the Victoria in the middle made no new growth of any kind and after two years the Czar died for no apparent reason. I prospected with a rod and found that the dead Czar had been planted in the centre of a 3-foot wide band of "noxious rays" and the Victoria was just on the edge of the band which then curved away well clear of the surviving Czar. The following autumn I transplanted the Victoria to a spot about 30 feet clear of the band and the following spring it started into growth for the first time. From then on it continued to grow normally and bore excellent crops without ever looking back.

Admittedly one such instance proves nothing but I am sure most of you here have had similar experiences and many such have been recorded from time to time. It does to my mind support the implication that any normal bio-electric state is liable to be disturbed when its natural surface potential differs from that of the surrounding air and that the attempt to adjust itself to the change in electrical conditions tends to divert physiological functions from their normal process for maintaining life. Where the effort has to be sustained for too long at too great an intensity a physiological breakdown seems inevitable, the weakest part of the system being the first to suffer.

My theory depends then on two assumptions, the validity of which could be tested experimentally :—

1. That the boundary of every dowsing zone is defined by a change in the atmospheric potential.
2. That a change in the atmospheric potential can, given suitable conditions, stimulate the neuro-muscular system of a trained dowser sufficiently and in such a manner as to enable him to detect the change.

Experiments have shown that a dowser's reaction is accompanied by a measurable change in his skin potential. I feel, therefore, that if this change can be related to a measurable change in the atmospheric potential at that point we should at least be in a position to give a partial explanation that should prove acceptable to many of those who are inclined to be sceptical at present.

Even if these two assumptions were proved to be correct it would still be necessary to discover exactly what physiological changes take place. For instance, is the change in the dowser's skin potential cause or effect ; does the current act directly on the muscles, or does it stimulate the motor nerve centre in the brain to activate them ? Which muscles are affected ; all or only those in actual use at the time ? I fear a considerable amount of long-term research by a skilled electro-physiologist is required before questions such as these could be answered.

At the risk of sticking my neck out still further, I should like to mention some of the medical implications that occur to me. Judging from my own limited experience, the present methods used by electro-therapists seem to be based on a mixture of empiricism and pure speculation. Not so long ago a runaway trailer nearly pulled my left arm out of its socket and after being prodded in the tender spots by the surgeon in the local hospital I was ordered a course of electro-therapy. This consisted in applying a pad to my shoulder back and front, after first removing all metal such as stud and braces ; the sister then switched the current to each pad, told me to call her if it got too hot and then went on to the next victim.

To an engineer this savoured of the days when a blacksmith judged whether the temperature of a piece of metal was about right for his purpose either by its colour or by spitting on it. In the latter case, the higher the spit bounced, the hotter the metal. Apart from the discomfort of being made to bounce when in pain I felt that there should be some better method of adjusting the current to the complaint. If it is possible to discover the physiological effects resulting from exposure to abnormal atmospheric potentials it should be feasible to devise some means of applying the correct potential to neutralise these results when necessary. To return to my own case, it should be possible to ascertain the extent to which the injured tissue had changed in potential and

the area so affected and to expose it to a suitable current based on this change, instead of just cooking healthy and injured areas alike with a simmering as opposed to a boiling heat. As a corollary, it should also prove possible to ascertain whether the various measures adopted for neutralising " noxious rays " produce their effect by altering the local atmospheric potential and, if so, for how long a period they remain effective.

In conclusion, I should like to quote further from Sir Edward Appleton's presidential address to the British Association :—

" The important thing in experimenting is to ask Nature the right question and in its most direct form. Only then is the answer clear and unmistakable. Many of our questions turn out to be wrong because they are unanswerable, but it is only by asking them at all that we eventually find we have asked the right one. And one knows how oddly, how unreasonably, I might almost say, the right question has often flashed into men's minds."

WHERE IT RAINS HOT WATER

BY GASTON BURRIDGE

It rains hot water all the time, the entire length of Tecolote Tunnel. In some places, a scant drop or two falls, in others, it comes down like a hard summer shower. In a few places it rushes from the blackness as if from a fire hose. Tecolote tunnel will be six miles long when completed. It is being drilled diagonally through the heart of the Santa Ynez mountain range to bring water from Cachuma Reservoir, on Santa Ynez River, to the old, romantic mission city of Santa Barbara, California, surrounding towns, citrus and avacado orchards of the coastal region.

Early one Saturday morning I met B.S.D. member, Mr. E. P. McMillen, of Upland, California, at a Los Angeles bus depot. We drove the 250 mile round trip together. We were making this journey for two reasons. Foremost was to see the great quantity of hot water coming into the tunnel. Its many punctured and cut fissures now deliver well over 5,200 gallons a minute. We wanted to determine whether this water might be of juvenile or primary origin. (*Radio-Perception*, Vol. XI, No. 82, p.194). And, secondly, we both were anxious to know what a dowser's reaction would be 2,000 feet *inside* the earth !

I went prepared with sample bottles for water and rock. Mr. McMillen took his dowsing rods. They were a fork made of two pieces of reed fastened together at one end, and a wand of similar material. He also carried his oil instrument with him,

but after we learned from Mr. McGreggor, our guide, the problems we were to face inside, he left it with our civilian clothes. Mr. McMillen had map dowsed this region extensively. He had designated both hot and cold water locations, and direction of their flows. It was our hope he could determine how accurately these flows and directions were, by going into the tunnel. We were somewhat disappointed in our findings on these matters due to many unforseen difficulties arising from our inexperience and knowledge of matters having to do with tunnels. However, much was accomplished by both of us. We feel the trip was highly successful and worth many times its effort and cost.

Mr. McMillen had also hoped to do a little prospecting "on top" of the tunnel, but this region was so steep, so high, and so overgrown with chaparral, it was impossible. The top of the ridge rises well over 2,000 feet above the tunnel entrance in less than three miles. Santa Ynez Peak is 4,300 feet altitude, and less than five miles away, air line. Thus, one realizes some of the difficulties in doing any "pin pointing" in such country.

At the tunnel we were outfitted with steel hats, shirt and pants, rubber boots and a "head light" attached to a battery on a heavy woven belt. The rubber boots were given us—they told us—to keep the rocks from hurting our feet. We understood what they meant better when we stopped at the "booster station" inside the tunnel, where we changed cars.

We checked our lights, put them on our hats and boarded the "chair car." This consisted of a four by 12 inch plank laid across the supports of one of the ore cars which was minus its hopper. This car was coupled at the end of a train of several other empty ore cars and pulled by a narrow gauge electric locomotive. And thus we clanked into an arch-shaped hole in a mountain side.

We had not travelled 50 feet inside the tunnel before I was hit by big drops of water—the first of many score. It did not seem hot, not even warm. In fact, it felt cold to me. We had not run far before our wheels were churning water deep enough to be above the rails of our narrow gauge tracks. At times, the water was four inches over the rails. In the light of our lamps, the water washed the sides of the tunnel and if we had not been travelling about 15 miles an hour, would have richoched back upon us.

The tunnel is not lighted so our lamps, which were quite powerful, lit each spot brightly, upon which they were directed. We passed through strata of different coloured sandstone and shale. These were also in varied thicknesses and tipped at diverse angles. The sandstone appeared to be in wide strata while the shales were from almost wafer thin to as much as six inches. Some sandstone had a cream coloured tint. Now and then, it was touched with pale rose or orange. Most of it was grey and

looked like granite. However, Mr. McGreggor told us they had not run into any igneous rock formations, nor did the resident geologist expect they would.

Soon after entering the tunnel one became aware of a warm, stuffy feeling. The heat increased steadily as we rode farther into the tunnel. After the first mile I became quite noticeably hot, and welcomed the showers of water we often passed through. It seemed cool when we passed through them, but was not cool enough to give one a "shocked" feeling. We learned water temperatures ran from 86 to 116 degrees Fahrenheit.

At two miles inside the tunnel we stopped to change cars. Here a great cavity had been hollowed out of the left side of the tunnel and here are located large water pumps and cooling air booster equipment. It is extremely noisy here. One cannot make himself heard to another unless he shout rather closely to an ear.

An empty ore car was being filled with water. The hopper is about six feet long and nearly four feet deep. It is triangular shaped with a rounded bottom at the vortex. When this hopper was full of water we were told to get into it! Now we understood what had been meant when we were told the rubber boots were to keep the rocks away from our feet. So, boots and all, we got into the ore car full of water. It was cool. Here we learned also, neither our batteries nor lights were affected by being completely under water for long periods.

Almost as soon as we left the booster station it began to get hot. Now we were passing through a portion of the tunnel which had been "cased off"—as all the tunnel ultimately will be—with about an eight inch layer of concrete. The temperature went up quickly to about 110 degrees F. The humidity was close to 100 per cent. I had trouble, in some places, getting my breath. Mr. McMillen's eyes smarted. We kept cool and collected by splashing the 80 degree water over our faces. That was the longest mile I have ever known!

Finally, we noticed it becoming cooler. Our train stopped and we climbed out of our car with difficulty. Boots full of water are heavy. Now we were at what is called the "heading" of the tunnel—that place where actual drilling of the rock takes place. Here, five large compressed air drills were assaulting the sandstone. The driller's lights flitted about like giant fireflies. The noise was beyond description—but it was most delightfully cool! The temperature was down to about 70. Made so by a great blast of outside air piped under pressure from a huge blower three miles away.

We had just arrived and had hardly got our bearings when the top rock drill shattered a fissure carrying additional hot water. It shot from the roof like a great inverted fountain. It had the pressure of a fire hose and showered water all over everything.

Soon, a plug made from a two by four inch piece of wood was thrust into the seam and ready hands held it while a maul pounded it home. But the plug wouldn't stay. Water pressure was too great. A hurried telephone call was made to the outside for materials to divert the flow so work could continue. It was estimated 200 gallons a minute was flowing from this new source. The water was well over 100 degrees in temperature.

This was nature in the raw. Man's ingenuity and determination were pitted against it. One could not help realizing, once again, ingenuity and determination would win out.

Was this primary water? I asked our guide if he could get a sample of it for me. He did so quickly. This sample was cloudy for two days after taking. Now, it is clear, a fine, grey sediment lying in the bottom of the bottle. This water has no marked taste. It appears quite "soft." I suppose they would have cracked that fissure anyway, but I like to think they saved doing it just for us!

All sorts of speculation rushes through my head regarding this water. Was its fissure just "nicked," and if really opened, how much water would it deliver? How great is the pressure it is under? Where did the water come from? Was it truly of juvenile origin or was it coming from some vast cavern where surface water has been accumulating for centuries? Probably we will never *know*, but here is a puzzle over which geochemists and geologists can argue for a long time to come.

During each stop, when Mr. McMillen could get off by himself, he was using his forked stick and wand. Some interesting points came to light.

Here he was, standing in six to eight inches of water, in a pair of rubber boots which had more or less water in them, with water streaming down the sides of the tunnel, raining off the ceiling in streams or sheets or sprinkles—and yet McMillen's fork would work! In one place the fork wished to pull towards him. He turned around, and it wished to pull away from him. He concluded his fork was pulling toward the nearest enclosed water and he estimated it was not far away. Mr. McMillen said if he were on top of the ground he would be much inclined to say the quantity of water indicated was of large extent. He did not think the water was below his standing level, rather, it was, say, waist or chest height.

Because of the tremendous noise, it was difficult to concentrate one's efforts. The strangeness of the sitnation was also distracting. However, Mr. McMillen made several tests and reported to me he was quite certain his fork was indicating other water than that immediately about us.

On our way out of the tunnel our train was side tracked for a short time waiting for an incoming one, probably bearing materials to take care of the new found water at the heading. While we

sat talking together Mr. McMillen showed me how his forked stick behaved at that point. I can say it definitely indicated water at our backs, which would have been on the right side of the tunnel, coming out, or the left side going in. The forked stick did not wish to turn all the way down, indicating, to me, the water was a little above us.

This was in the part of the tunnel where there was stratified shale. These strata had been cut by the tunnel's bore at about a ten degree angle, using the strata's flat surfaces as a base. The cut of the strata showed they stood at about a 50 degree angle. Therefore, I concluded there was probably a fault fracture carrying the water. There was some water coming into the tunnel between some of these strata not far away.

Of course, we must not make any definite statements from only one experiment of dowsing underground. Such would be illogical. However, it may indicate a line of future experiments others may be interested in carrying out. If enough are performed, and their results recorded, a pattern may begin to outline itself. From this pattern, still other experiments may be indicated, and in time some truly valuable information be uncovered.

At least, Mr. McMillen has had some interesting experience, and, I think, has done some valuable spade work toward uncovering another phase of the dowsing art.

GEOPHYSICAL CAUSES OF ANIMAL DISEASES

BY DR. J. KOPP (HYDROLOGIST, EBIKON)

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Investigations carried out by geologists and physicists during the last ten years have shown that in good conducting strata in the subsoil, especially in subterranean water courses and water bearing fissures and faults, earth forces of a magnetic, electromagnetic and electric nature are generated. Such forces are included under the general heading of "earth radiation." The leading hypothesis to-day is the German conception that currents of underground water produce a form of "*Kipp*-oscillation" with a frequency of 1 to 11 Herz which manifests on the earth's surface in the form of well defined "harmful bands" above which there is *a considerable increase in the ionisation of the air.* These harmful bands, which a dowser can detect, can be observed by means of geophysical instruments of various kinds, especially electrometers or electrical resistance measuring instruments as the French engineer Cody has proved by thousands of observations.

The Dutch geologist, Dr. S. W. Tromp, has confirmed by numerous experiments that a normal electrocardiogram of a man standing on a harmful band cannot be recorded and that at such places the electrical resistance of the skin may be reduced by as much as a half. The observations indicate that radiation from the earth causes physiological anomalies which in the course of time produce biological effects.

Experiments carried out in several countries on animals kept over harmful bands originating from subterranean streams, have resulted in the appearance of various diseases. Dr. Jenny, of Aarau, observed a reduction in the breeding of mice and in the size of litters under such conditions, as well as a higher rate of mortality and the more frequent occurrence of cancer. Experiments by Professor Lautenschlager, of Munich, produced similar results. Those carried out by Professor Miescher in Dr. Jenny's laboratory, however, showed a striking absence of pathogenic effects, but Professor Tromp, who took part in them, has rightly pointed out that something in the nature of a Faraday cage had been formed by the presence of the heavy ironwork, iron window frames and lattices and by the installing of a ventilating system, which together tended to neutralise the effect of the harmful bands. These control experiments had accordingly in no way prejudiced the convincing results previously obtained by Dr. Jenny. Finally the recent experiments undertaken in the Pathological Institute of the University of Graz by Prefessor Beitzke have proved that mice exposed to the harmful bands suffer a fourfold greater mortality from cancer than did animals on neutral ground.

It would take too much space to record all the geophysical and biological experiments which have been carried out to account for the pathogenic effect of earth radiations. At the Congress of Geopathy held last year at Eberbach on the Neckar a review of the present position regarding the scientific investigation of the biological effect of " ground influences " was made by geologists, geophysicists and doctors. A resolution was passed accepting as proved the existence of locality diseases and investigation on a broader scientific basis was recommended—as had been done several years before by Professor of Hygiene Dr. von Gonzenbach, of Zurich.

Following these introductory remarks on the scientific investigation of earth radiations and geopathy and their effects, several actual examples are described, related and discussed. In my opinion harmful bands play a contributory, if not the chief part in the following cases. It is a pity that until now only in one case has a veterinary examination been carried out. The possibility therefore exists that in one case or another a veterinary surgeon might record a different verdict. In the last few years I have had much experience of the pathogenic effects of harmful bands in connection with houses and stables.

* * * *

A particularly striking result occurred with a stable in the Zugerberg. The Corporation of Zug had, several years before, put up a large stable on the Hintergeissboden. Soon afterwards the cattle showed unmistakable signs of rheumatism in the joints. Dowsers said the disease was due to underground water courses, which impelled me to make an examination with a pendulum myself. Inside the stable I detected five harmful bands caused by undergrounds springs, and marked them with blue chalk. I then got the farmer to join me and asked him at which spots the cases chiefly occurred. It appeared that four of the harmful bands coincided with the places where sickness occurred. On two of these spots cats had made straw nests, for, as is well known, cats, like ants and bees, prefer to settle over harmful bands, sensing them as beneficial.

The Hintergeissboden stable is situated obliquely on a gently rising moraine slope. I estimated the depth of the springs to be about 6 metres, so that in order to confine them, it was proposed to dig a deeper ditch the whole length of the stable. At first a screening apparatus was tried of a kind which is generally regarded as effective. But apparently the water pressure was so strong that after a lapse of two months no satisfactory neutralisation of the pathogenic effect of the harmful bands could be observed. We then proceeded to dig the ditch and at about 6 metres we struck a stratum of *Molasse** on which several springs originated yielding 20 to 35 litres per minute. The water obtained in this way provided a supply for week-end cottages, whereby the considerable cost of the excavation was partly covered.

An enquiry made after a few months revealed a clear improvement in the health of the animals in the stable so that the removal of the harmful bands had been completely successful. This was confirmed by Veterinary Surgeon E. Gisler of Zug, who had been engaged for the treatment of the animals. According to his statement, the farmer of the Hintergeissboden exchanged the sick animals for others from his farm at Baar. There was again a slight improvement, but the weakness among the animals was abnormal and would have become prohibitive. Dr. Gisler stated that after the confinement of the springs, there was an immediate improvement and no further complaints had been made.

That is one of the many cases which the author has been able to observe. Very often it has been possible at the outset to indicate in stables the places where diseases occur. Particularly bad are those places situated above the crossing of underground streams running at different levels. Moreover such places attract lightning flashes, as extensive observations have shown.

Horses are particularly sensitive to the effects of harmful bands. In several cases exposure to them has resulted in decom-

* A soft green sandstone found in the district between the Jura and the Alps.—EDITOR.

position of the blood, or blindness, if the bands lie beneath the head. During a search for water for a farmer in Entlebuch, it turned out that a stream passed through the stable under the head of a horse which shortly after became blind.

Another very difficult case was observed at Rain. A farmer had a nervous affection which enabled him to escape military service. In a short time he lost three horses from his stable through decomposition of blood. An examination disclosed that a strong spring passed under his sleeping place and under the horses' stall. Its harmful effect was so great that I experienced a feeling of prickling in the finger-ends whilst I was working. The interesting fact had been observed that when the baby's perambulator was standing over the band the child began to cry but quieted down directly the perambulator was moved a metre or so to one side.

I was once asked to examine a stable at Roggliswil. I walked along the row of animals without finding any harmful bands. To make sure I tested the flanks of the two outer animals at one end of the stable with the idea that perhaps a band might lie beneath the front part of their bodies, and I found that the end cow on the right had its head over a band. The farmer, who before my examination had been completely in the dark, now stated that just at that spot a horse had at one time occupied the standing but had succumbed under an operation, due to decomposition of the blood, much to the surprise of the surgeon who had been treating it. The farmer had bought another horse which now stood in the stall at the left of the entrance and was quite sound.

It is well known that horses are very sensitive to electricity. According to Professor Häfeli a frictional effect is caused by the flow of subterranean streams, producing thereby an electrical field. Perhaps this explains the peculiar susceptibility of horses to harmful bands. Cattle which have standings on these bands are often barren or miscarry. Pigs, too, are extremely susceptible.

An instructive case of chicken disease I owe to Dr. E. Gisler. In a fowl house at Siechtum he observed cases of emaciation, swollen combs, empty maw, small abscesses on the head and dirty feathers on the hinder part. When the spring which passed under the fowl house had been confined all became satisfactory.

In a fowl house, where on several occasions hens had died, I detected a harmful band but, after a deraying apparatus had been installed, the place became healthy. The well-known German investigator of Geopathy, Dr. E. Hartmann, of Eberbach, has observed that fowls on harmful bands perish from leucosis. He also noticed that cows and goats in similar circumstances give more milk after a change of position or after the installing of a deraying apparatus.

In the international literature of Geopathy are to be found so many observations on the occurrence of disease over harmful bands as to suggest the necessity for further study and experimentation on their effects and neutralisation. The factual material pointing to the connection between earth radiation and diseases of men and animals is so large that this problem can no longer be dismissed with a shrug of the shoulders. The economic damage suffered by agriculture every year is such that the fundamental study of the methods for the cancellation of pathogenic ground influences is fully justified.* As this subject lies in a border region between Geology, Physics and Medicine and also concerns veterinary practice, close co-operation between these sciences is essential to a successful result. In the Technical Highschool at Delft in Holland an institution of psychical physics has been started for the study of the effect of ground influences on plants, animals and human beings, including the problems of ground and cancer. Similar steps should be taken in Switzerland in order to arrive at a solution of the problem of pathogenic ground influences.

Many inexperienced and all too commercially minded dowsers are active in this matter of the discovery and screening of earth rays, as my veterinary surgeon has learnt, and on this account there often exists reluctance and sometimes prejudice against any nearer acquaintance with this much discussed problem. Nevertheless literary references to this subject show that investigators in different branches of science, especially abroad, have been striving to obtain, by means of careful records, detailed information on harmful bands and their effects. To-day one no longer has to rely on uneducated and inefficient dowsers for carrying out investigations as it is now recognised that certain students of the divining rod have as a result of their experiences contributed much valuable data towards the elucidation of the problem. To the sceptical who are inclined from now on to regard with disapproval everything connected with the rod and earth rays I would like to oppose the remark of a young Lucerne doctor—a reliable dowser—who, on the occasion of my lecture on the problem of pathogenic earth bands to the Medical Society of Canton Lucerne, interrupted the discussion with the words: "Contra factum non valet argumentum."

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* At the second Congress of Geopathy at Eberbach allusion was made, in connection with practical experiences in the field, to the significant increase in the biological effects of the harmful bands from underground streams in the neighbourhood of high tension cables, an observation which demands further study on the part of veterinary surgeons.

PART THREE

BUSMAN'S HOLIDAY IN JESUITLAND

BY SIR CHRISTOPHER H. GIBSON, BART.

PART III—LORETO*

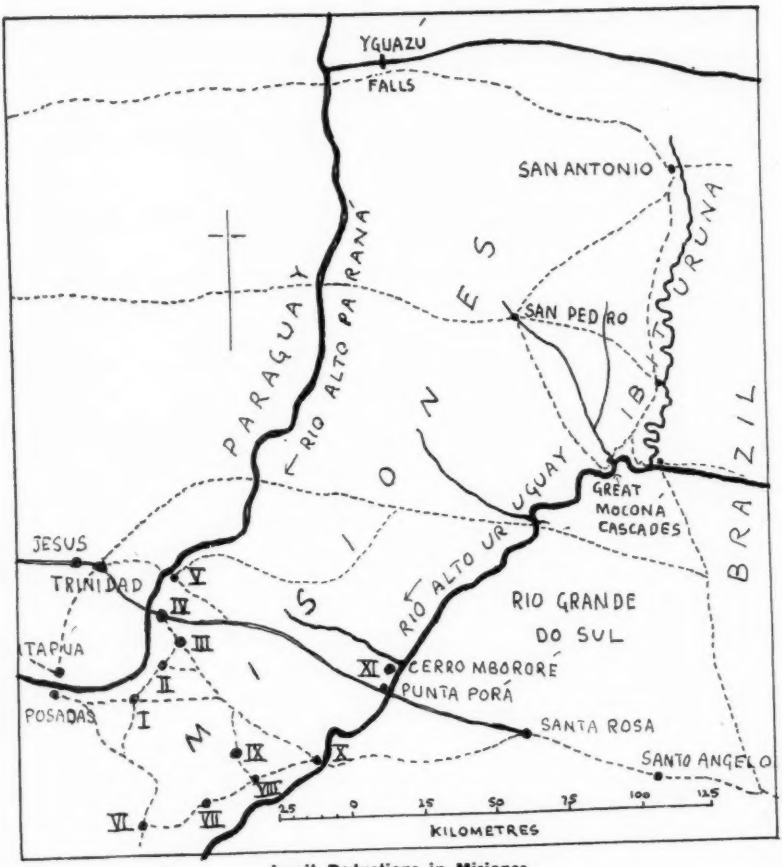
The Reduction of San Ignacio Mini—once "Group Centre" for the neighbouring but larger strongholds of Santa Ana, Loreto, Corpus, Trinidad and Jesús—had always been my "No. 1 super priority" objective on the Upper Paraná River, linked as it was by the direct route of the Ancients with my little property on the other side of Misiones, for many intimate personal reasons, and because I had good reason to believe that thither had been brought and most cunningly secreted by the Jesuits themselves, the bulk of the archaeological and material treasures from their neighbours, when the order for their expulsion from South America came from Madrid in 1767.

San Ignacio had been beautifully restored by the Argentine Government in 1941 in order to raise it to the status of a national monument, but the application I had made three years previously through official channels for permission to excavate there was still hanging fire. And so, as the period I had earmarked for my "Busman's Holiday"—which was to have included the start of operations at San Ignacio—was drawing near, I had to make other arrangements.

Second on my list as pearls beyond price was Loreto, though strange to relate I had never been able to reach the place as it lay a little to the East of the main highway linking Santa Ana with San Ignacio, was without regular transport service, boasted no inn at which one could put up, nor did I then have any friend who lived in the district. Perhaps I should add that Santa Ana, second largest in Misiones, offered no special attraction as it had been completely razed and looted, nothing remaining but the foundations of the colossal walls which had enclosed a hundred-square-yard temple—now the modern graveyard—to show where the seventy-acre fortified township had once stood.

For many a moon I had had this kind of mystic urge to visit Loreto, once famous for its statues (or so my instinct told me) and for its stone Virgin whose alleged miraculous powers brought pilgrims flocking from many parts of the country. As in all cases of the areas I had particularly wanted to investigate, in this instance I had started working on the corresponding dowsing

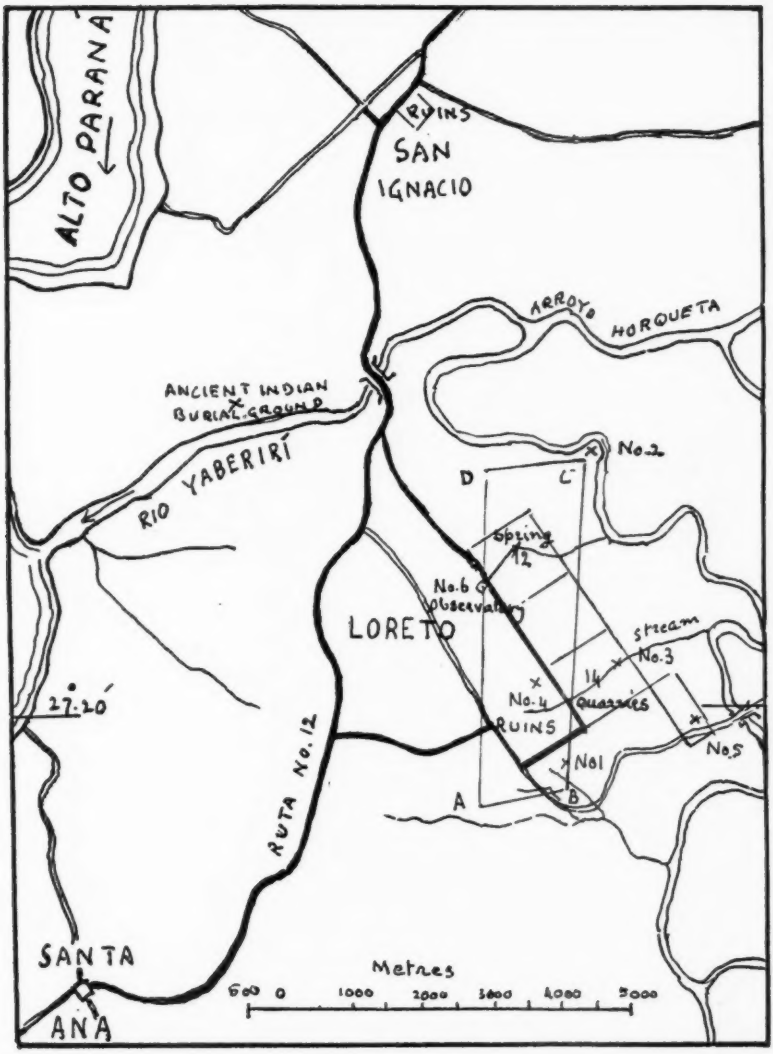
* See also previous articles by Sir Christopher Gibson: "Dowsing Adventures in the Land of the Jesuits" in Vol. X, 77, p. 293; "Busman's Holiday, Part I" in Vol. XI, 82, p. 213, and "Part II" in 83, p. 273.



Jesuit Reductions in Misiones

I CANDELARIA	VII CONCEPTION DE LA SIERRA
II SANTA ANA	VIII SANTA MARIA
III LORETO	IX MARTIRES
IV SAN IGNACIO	CAA-GUAZU about 5 kilometres south of above
V CORPUS	X SAN JAVIER
VI APOSTOLES	XI ASUNCION

Principal routes are shown by dotted lines except for the direct route from Santa Rosa through Trinidad, passing Sir Christopher Gibson's House at Punta Pora.


ALTO PARANÁ
RUINS
SAN IGNACIO
ARROYO HORQUETA
ANCIENT INDIAN BURIAL GROUND
RIO YABERIRÍ
No.2
D
C
Spring 12
No.6 Observatory
LORETO
stream
No.3
14
No.4
QUARRIES
RUINS
No.5
No.1
A
B
27.20
RUTA No. 12
SANTA ANA
Metres
500 0 1000 2000 3000 4000 5000

plan no less than a year earlier. But it was beginning to look as if it would be a case of love's labour lost, when, on the very eve of departure for the other target areas I intended to explore at the beginning of March, 1953, there erupted into my hotel bedroom in Posadas a dynamic gentleman whom we'll call "Stan," demanding with considerable excitement that I simply must come to his farm at Loreto where he'd gladly put me up and pay all expenses; moreover, he possessed a two-seater car with a high clearance in which we could cover all the rough trails of the district. Apparently he had come hot foot from my good friend, the noted antiquarian, who had been telling him something of my prowess in other Jesuitical zones.

It seemed like a direct answer to prayer. After discussing ways and means, we finally fixed on a date towards the end of April (which would also end my holiday), though upon showing him my map with its many targets I was careful to explain that there would be no time for more than a superficial examination on this occasion—that it would be impossible to excavate should any interesting surface evidence be discovered—as the area was considerable and I was tied down to a strict time-table. Stan saw the point and raised no objections.

As it proved to be the most unusual—from a scientific angle—of the sundry other plans I had drafted by teleradiesthesia, it is here necessary to describe at some little length this composite "battle map" of mine, which I had based on the Military Geographical Institute's surveys on a scale of 1:50,000. The latter, quite literally, showed nothing more than roads and trails, the Rio Yabebirí—dividing the Departments of Loreto and San Ignacio—together with a few of its main affluents, and a certain area marked "Government Experimental Farm." Nothing else at all, nor any hint of where the Reduction might have been situated.

Well, the first thing to emerge was the remarkable rectangle A-B-C-D, with vaults (? ?) at each corner. In the early stages I thought the lines might represent tunnels, but quickly put this out of mind when sundry interesting prospects began to take shape on the lines or at the corners or within the rectangle itself, most of which I seemed able to identify and name. Finally I had to invent my own terminology for this (to me) new phenomenon, dubbing the lines my "magnetic dowsing bearings"; for the long A-D and B-C sides, running almost due N/S—there was only a difference of 5 degrees—were parallel to each other and of approximately equal length (about 5,000 metres), separated by a width of 1,300 metres. The western line A-D passed through the Experimental Farm, where I had marked in the more abstract or "psychic" conclusions such as "Statues—Sabotage?" and through No. 6 Prospect which I perceived as the Jesuit Observatory, linked by a tunnel 700 metres long with a spring and stream, which had evidently been used in times of danger to bring water

to the Observatory unseen by the enemy. Near the point B on the B-C line I marked my No. 1 Prospect—seemingly something of great value lying in a vault; while within the rectangle close to B there emerged an Outer Defence Wall and two Streams. Also within the southern part of the rectangle and overlapping into the Experimental Farm appeared to lie the ruins area, complete with drainage trenches flowing eastwards and two Wells with mineral spring water. To the east of the rectangle there seemed to be another interesting area which included the Jesuit quarries and an "exciting" spot (No. 3 Prospect) situated on a little stream. Lastly, about 350 metres N.N.E. of the point C, I marked in my highly intriguing "No. 2 super-priority Prospect" on the very bank of the R. Yabebirí, where it formed a sharp-angled crook. Sundry other map-read prospects are not mentioned in this account, as I was unable to reach them on the present occasion.

* * * * *

Stan proved to be a good travelling companion and showed considerable resource during our picnic stay at the broken-down shack on his 120-acre farm lot, which he had bought only recently at a very low price owing to its wholly neglected state. One of the drawbacks was that the existing well had dried up—I marked another for him quite close which subsequently gave an ample and permanent supply at 3½ metres—so we had to fetch our water from a neighbouring farm that belonged to one of nature's gentlemen, named Abraham Kassab. I've got to say something about this grand old man, so very different in every sense to the "para-rhabdomants" with whom I had recently been inflicted at Corpus, because it was thanks to his unstinted collaboration and the story he unfolded that I was able to prove the absolute accuracy of my map-reading, down to the smallest detail and including my abstract conclusions.

When they were young children, Don Abe and his brother had been brought from the Lebanon by their parents; later, the brother was ordained and became parish priest of Loreto, buying the entire Reduction area—about 1,200 acres—which was then fiscal land. At that time the ruins were in a better state of preservation than those of any other Jesuit reduction in Misiones, adorned with countless *stone effigies* of angels, gargoyles, saints and a gamut of the animal kingdom, not to mention the famous Virgin who was ensconsed in a little shrine within the crumbling walls of the temple. The brothers realized that it could be restored into a truly wonderful show place—far outrivalling San Ignacio—at relatively low cost; but the project was beyond their personal means and so, in all good faith, the priest *loaned* the heart of the ruins area to the State, in the hope that they would make a proper job of it as they promised to do.

Vain illusion! Ten years later the priest died, leaving Don Abe as his sole heir. The latter was now endeavouring to sell his own two beautiful farming lots of 240 acres each, and with the proceeds reclaim from the Government that which was lawfully his in in order to clear the wilderness which had covered the site of his beloved ruins, if only in memory of his equally beloved elder brother.

For here was being enacted the same old story that had overtaken the other Misiones reductions, save that in this case it was infinitely worse—being of much more recent date—and beyond all limits, making me seethe with indignation as we made the sad rounds. . . . The present-day vandals, for whom there was no excuse as they were not ignorant peasants, had looted every statue with the sole exception of the Virgin—even she had had her face smashed, which Don Abe had painfully tried to repair, and was now housed under lock and key in a newly made brick chapel, though hardly any pilgrims had come since the outrage took place. . . . The remains of the core of the ruins—with the inevitable modern cemetery stuck in the middle of what had once been a superb temple of fantastic proportions—were steadily being demolished and *sabotaged* until hardly anything had been left, the great stone wall blocks and beautifully finished paving stones being used to build horrible workmen's dwellings. . . . To judge from the *quarries*, which I had accurately sited and which proved to be on Don Abe's home farm, the Jesuits must have removed many hundreds of thousands of tons of stone to build a reduction of such enormous proportions. . . . The whole area had become covered with dank impenetrable undergrowth, above which reared a few stately forest giants, orange trees and wild yerba (*Ilex paraguayensis*)—sole visible reminder of what had once been such a majestic spot.

The *drainage trenches* ran eastwards towards the R. Yabebirí through the southern part of " A.K.'s " home farm, while the two *mineral spring wells*—producing delicious ice-cold water—proved to be situated by his modest house and that of his brother. When I showed him my map, at first he simply could not believe that I had marked in all these details with such accuracy without ever having visited the locality, but was quick to grasp the theory of teleradiesthesia although he confessed it seemed much more like " white magic " to him!

Then we set about the business of trying to approach my No. 1 " super-priority " prospect—which was very much easier said than done, for the corners of the farm lots of three separate owners—one of whom was languishing in gaol—all converged at this spot, cultivation having been virtually abandoned for which reason the whole area was densely overgrown. But the fact that Don Abe was so deeply respected and liked, plus my

offer to locate water on the land of interested parties, quickly overcame these initial difficulties.

Accordingly, early next morning we made our first attempt from the road to the S.W. of the target, at a spot where a little *stream* I had marked in was found to exist and on the " dowsing bearing " line A-B. For four hundred metres we hacked our way with machetes through dense undergrowth and matted thorn bushes ten feet high ; but when we scrambled over the previewed *outer defence wall* I whooped with joy, for I knew that my " psi " faculties had not failed me. Beyond this lay a little *gully* and *stream* which I had also marked in, and beyond this again the target area. Sundry tests seemed to show that we had reached the right locality, though it was impossible to pinpoint the exact spot—*an assumed coffer lying in a deep vault*—owing to the dense surrounding undergrowth which would have to be cleared before a more thorough prospection could be carried out. But in order to get another cross-bearing and make assurance doubly sure, after lunch that day I paced off the corresponding distance from the crossroads by the school to the point of intersection with my B-C " magnetic dowsing line," here turning left-handed into the wilderness and following the " line " on a compass bearing of 185 degrees. Before long we had reached the outskirts of that same matted vegetation covering the actual target, when the pull on my rod became so strong that it brought me to the verge of unconsciousness. With an exhausted grin I turned to my companion, and said : " *There* lies a ' reasonably certain certainty,' Stan—if the Lord so disposes we'll have up that coffer when time and opportunity permit ! "

* * * * *

Next day we determined to explore my " exciting " No. 3 Prospect. Accordingly, accompanied by Don Abe and Stan, I paced off the necessary 500 metres along the road on the eastern boundary of the former's home farm (Lot No. 14)—a feat which, from very long and constant practice, I can perform with entire accuracy to within a couple of metres or so in a thousand, no matter what sort of terrain I am covering. Here we turned left-handed into the farm at right-angles, where I paced off the 95 metres that remained. Imagine the tremendous thrill when this brought us into a dell on the edge of the little previewed *stream*, and slap into the middle of the *ruins of a Jesuit building made of hewn wall blocks and once roofed with tiles*, about fifteen metres square ! Don Abe thought he had known every inch of his property, but for some mysterious reason he had never penetrated to this precise spot, and gasped with amazement when he saw the truth there before our very eyes. He gasped still more when the pendulum—which I had replaced for the rod and was now using with gold and the shard of Cacique Güyraviyú's burial urn as witnesses—was torn clean out of my

hands over the spot where I thought a private hoard might be buried. I then rechecked with a stout peach rod, whereupon it splintered to smithereens! At this dramatic stage the Chief seemed to "diagnose" the case as follows: "In the year 1865 certain individuals buried a bag made of rawhide containing 25 kilos of gold coins and 20 kilos of silver coins at a dept of 1½ metres." Well, we hoped it was true! But as there were some charcoal burners working close by, Don Abe wisely decided to postpone any thought of excavation for the present.

* * * * *

It was little short of tragic that at that time it was impossible to obtain good film for my camera, for mere words fail me in trying to describe the surpassing mellow beauty of this lovely countryside. Something of the serene tranquility of spirit of the Jesuits seemed to have permeated the very atmosphere. The hills were but gentle inclines, the stately forests—park-like—on Don Abe's well tended farms were free of undergrowth, nor was there a single mosquito or *mbaregüí* biting fly to annoy one in the cool of the woodland paths or in the red lanes meandering lazily through leafy glades and fern-decked greenery.

To wander with the owner through his ever-changing properties became a sheer joy. The stone quarries and sand and clay deposits which the Jesuits had exploited to such advantage, was admittedly rather a spooky place, the bare rock in parts sprouting with giant cacti where—'twas said—flitting lights could be seen o' nights. But when we visited his North Farm (No. 12), my cup brimmed over. For there, on the exact spot where I had marked it, stood a conical knoll—unquestionably the *Jesuit observatory*—from whose summit could be seen the whole snaking course of the lower Yabebirí, a river of considerable proportions, with San Ignacio set out like a toy village in red and white paint beyond it, and beyond that again the mighty Alto Paraná merging into the smoky-blue distances.

The real excitement, however, came when we reached the *spring* welling in a ferny grotto in A.K.'s forest, about *700 metres* from the observatory and connected with it by a *tunnel* which the Jesuits had—unquestionably—used in times of peril to fetch water unseen by the enemy. Parts of the tunnel at the spring end had now begun to collapse through the constant action of water over a period of more than three centuries, and it was with feelings of considerable awe that I clambered down into one of the caved-in sections, four metres deep—it must have been five when first made: the "standard" depth—and gazed upon that amazing handiwork.

* * * * *

Then came the grand climax. At first we had encountered all sorts of difficulties in trying to reach my No. 2 "super-priority"

Prospect on the bank of the Rio Yabebirí, which had been drawing me like a magnet from the outset, for the farm lots—and the few existing trails—were laid out on the same sort of cock-eyed angles as those I had encountered at Corpus and San Javier, throwing us out of our bearings; while the writhing course of the river itself was shrouded by forest that hemmed it in for many hundreds of yards on either side. It was only after fruitlessly exploring several dead ends that I had the brain-wave of leading my friends to the top of the Observatory again, from which I took a compass bearing and pointed out the exact spot as well as I could to Don Abe, though the jungle seemed denser than elsewhere in that great crook of the river.

"That will be Widow Pleasant's farm," murmured A.K.; "a kinswoman of mine and a kindly soul who will raise no objection to exploring her land. But she only cultivates the southern part of the farm, so we'll have to wield our machetes in order to get through the forest undergrowth beyond her house."

And thus it came to pass. After a couple of hours' strenuous exercise with visibility never more than a couple of yards in that tangled foliage, my rod and pendulum urging me on with ever increasing intensity in that one and only direction, we suddenly glimpsed a thread of shining water ahead. And then, almost before we knew it, we were on the brink of an extremely precipitous bank, draped in a smothering mass of lianas and flowering creepers that reached the water's edge, completely screening from the prying eyes of any passing boatman the huge boulder at my very feet, to which was rivetted a massive chain nearly rusted through with age, at the end of which I could just discern the faint outlines of an enormous coffer or box of sorts that lay at a depth of about 3½ metres beneath the surface of the clear water.

My heart seemed to perform a double somersault and I sat down abruptly, for here indeed was food for furious thought. . . . Not only must this be the chain which, so rumour had it according to the keeper of the ruins at San Ignacio, was supposed to exist somewhere hereabouts, but it sent my mind racing back to the desolate spot where, a bare month earlier when I had started my "Busman's Holiday," I had hacked my way in drenching rain through a kilometre of forest in a virtually unexplored region on the upper reaches of the Rio Uruguay. On that occasion, as on this, I had emerged on the banks of a big affluent of the latter, to find at my feet another hugh boulder on which was a time-worn Latin inscription, which read: HIC CONSIDO HIC DETINEO—Here I sit, here I stay (occupy). And rivetted to a jagged and wholly inaccessible tooth of rock in the middle of that river was another massive chain, disappearing beneath the waters of the deep pool that surrounded it.

It all seemed far beyond the bounds of mere coincidence . . . and now I could actually *see* what was at the other end of the chain. But I also saw, only too plainly, that some sort of joist or winch would have to be rigged up in order to raise that great bulk *vertically*—it would be hopeless to attempt a lateral pull, such as hitching oxen or a tractor to the chain, owing to the steepness of the bank. . . . The whole plan of action would have to be worked out carefully for some later opportunity.

With the intention of diving in order to have a closer look at that dimly looming mass, whose nature and details were indistinguishable at such a depth, I began to undress when Stan and Don Abe stopped me.

" This water is nearly stagnant for the river is very wide here," said the latter, " and is therefore sure to be teeming with *piraña*s." I had had ample experience of these horrible little man-eating fish during many previous expeditions in Northern Argentina and Paraguay, and reluctantly admitted the wisdom of my friend's words. But it was with a feeling of bitter disappointment and frustration that I was obliged to postpone further operations until yet another day, the accuracy of my map-reading in regard to these wonderful prospects being but very cold comfort indeed at such an emotional moment.

However, as I write these words more than a year later, the time is at hand when I am about to revisit Loreto with Stan and renew my friendship with A.K. And then—who knows what may transpire ?

HOW TO USE A TIMETABLE

BY J. GUMPERTZ

One evening the mother of a young woman called upon me at Crocifisso to seek my help in finding her daughter, who had been missing for three days from her home at Lugano.

She told me that the young woman had left for her office one morning as usual but had not arrived there. A friend of hers had accompanied her to the place where the funicular branches off for the Upper Town and from that moment no news of her was forthcoming. The authorities had inquired at every station near Lugano, without result. The mother had brought me a photo and some garments so I sat down at once and started to work. Having first got with the pendulum the reaction which for me indicates LIFE I held the pendulum over the map at the point where the girl had last been seen and from there the pendulum led me to the *debarcadero* (ship station).

At this point my visitor intervened remarking that she had already been by boat to Porlezza (at the east end of the lake). Thereupon I took up the timetable intending to find out the

course of the boat the girl had taken. My pendulum indicated the boat of 10 a.m., and on examining the timetable more closely I found that this voyage served only part of the Lake. Continuing my examination of the map, I came to a full stop at one of the lake-side hamlets and told my visitor that it was there that she should look out for her daughter.

The next evening she returned so changed in manner that I could hardly recognise her; before she had been pale and broken down but now she was smiling for pleasure. She told me that, with the photo in hand, she had first called on the man at the landing stage who at once recognised the photo as that of one of the three passengers who had arrived on the boat of 10 a.m. She had then called on the priest of the hamlet who confirmed that he had seen the girl at the service that same morning and could even describe the dress she was wearing and tell me where she was staying.

So she found her missing daughter.

She thanked me over and over again for my help, but how without examining the timetable would it have been possible to trace the missing girl in such a short time?

LETTER TO THE EDITOR

c/o Westminster Bank Ltd.,
Canterbury.

Dear Colonel Bell, *June 26th, 1954.*

I think you may be interested to hear the result of my map divining for an Oil Magnate in America whom I contacted through Kenneth Roberts' book *Henry Gross and his Dowsing Rod.*

You may remember that Kenneth Roberts was good enough to make quite a lot of references to my map divining in this book.

I did a number of maps of the State of Michigan to which I have never been, nor did I know anything about it before starting my map-work.

I have just received a letter from the Oil Magnate informing me that he has put down nine oil bores (" wild cats ") on the spots which I marked on two maps and he has eight yielding oil wells from them.

Having proved the value of map divining for water all over the world, it is a great pleasure to me to feel that it is also so successful for oil.

I am returning to Australia on 1st September next and my address will be c/o Bank of Adelaide, Perth, Western Australia—as it was before I left on a world tour.

With kind regards.

Yours sincerely,
EVELYN M. PENROSE.

NOTES AND NEWS

A chapter near the end of a book recently published, entitled *Psychical Research To-day*, by D. J. West, M.B., is headed "Fresh Light on some old Beliefs." The matters dealt with in this chapter are described as being "on the borderline between psychical research proper and those remnants of occult and magical traditions that have survived to the present day," and the first to be discussed is "Dowsing."

One gathers that the author is inadequately informed on the whole subject, as much of the matter in the three pages devoted to it is largely out of date and altogether misleading. He does not seem to be aware that dowsing is applied to other objects than those he mentions, for most of his remarks deal with the location of water only. By way of throwing fresh light on this subject he has drawn on information compiled by Sir William Barrett towards the end of last century, and the only mention of dowsers of to-day is a somewhat inadequate reference to Major C. A. Pogson. A picture showing a group of French dowsers refers to a Congress held over thirty years ago.

In view of the extent to which dowsing is now being successfully used in Europe, Asia, Africa and the U.S.A. for finding water supplies, this limited survey of the question is, to say the least of it, disappointing. The author does not appear to realise that dowsing of any kind is not only a matter of sensitivity but of experience, and that a dowser's skill can best be gauged by a consideration of his personal record, rather than by some inept test carried out under unsuitable conditions by unsuitable investigators.

Facetious remarks on the use of the pendulum for diagnostic purposes present a distorted view of the real procedure, and give no hint of the remarkable results often obtained when the traditional orthodox methods have proved ineffective.

"Fresh light" on the subject acquired during the last thirty years by serious and unprejudiced observers shows that dowsing or radiesthesia—the word invented by Abbé Bouly—is a form of sensitivity possessed in some degree by about 80 per cent. of the human race, and that it responds in varying degrees not only to direct physical causes but also to stimuli from the unconscious mind. Radiesthesia can only be regarded as a science in itself, and attempts by physicists or psychic investigators to adjudge it from their own scientific standpoint are futile and vain.

* * * *

It was stated in the *Times of India* of April 8th that Mr. A. M. Rao, a water diviner, had been invited by Ahmednagar Municipality to examine the water ducts which supplied the city with water during pre-British days.

A short article in the *New York Times* of May 9th states that a well being dug at Lambertville, N.J., was located by two amateur dowsers, Harvey Mathews, of Pottstown, and Oscar Woofe, of Flemington. They had been engaged after the City Commission had decided that a supply for fire fighting was required and chose the site independently.

* * * *

The *Santa Ynez Valley News*, Solvang, California, of May 21st, contains a long illustrated article discribing how a 72-acre farm is being successfully developed by means of an irrigation well located by the well-known water diviner R. D. Carse (B.S.D.).

* * * *

An account of an interview with Mr. Arthur F. Wheeler, the water diviner of Kirby Bellars, was printed in the *Leicester Mail* of May 27th. As with many other dowsers a watch worn by him always stops after he has worn it a few minutes.

* * * *

The *Irish Times* of July 13th reported that Mr. T. J. Kelly (B.S.D.) gave an address on the previous day to the Dublin Rotary Club on the art of water divining.

* * * *

In the first of a series of articles by Mrs. P. de B. Greer in *The Farmer* (Bridgwater) of July, she states that though she has never practised dowsing as a profession she has always been able to locate water when asked to do so. She cannot divine unless she is physically fit, nor when she is insulated from the soil.

* * * *

Mr. W. H. Burgoyne (B.S.D.) writes as follows : " My exploit on Whit Monday.—At 7.15 a.m. a young man from Plymouth called for me to try to find his father. I started off (using a pair of spectacles as a sample) from a spot where the father was seen on the Saturday evening, followed him through the marshalling yards at Laira, through a playing field on the Saltrum Estate, then I wandered around the Estate till 4 p.m. Heavy rain stopped the search party going further and as I was wet through and nearly exhausted they would not let me go on. During the search the party brought me lots of pieces of paper, etc., and five responded to the sample : 1 paper bag, piece of a bun, crust of bread, 2 chocolate wrappings. Next morning early before we could start a lad came through the woods and found the body 50 yards from where we sampled the five pieces, so I was pretty close when we left off on the Monday."

REVIEWS

LA RADIESTHÉSIE POUR TOUS

May

p. 131. Radiesthesia in daily life.—Albert Bogaert gives instances as to how radiesthesia can come in useful in daily life. On one occasion the roof over his bedroom leaked so that the rain was always coming through and along the length of one wall. After more than one attempt to get a successful repair made, he invoked the assistance of the pendulum, which indicated just where the rain was coming through. On another occasion he was asked by a farmer if he could find a source of fresh water on his farm, where only brackish water was available. At first he was inclined to refuse, as he had never worked on the ground. But he made a small plan of the buildings and obtained indications for fresh water, and confirmed his findings on the site. His researches proved successful.

p. 133. Difficult researches.—W. Servranx gives an example of a difficult radiesthetic research and how it was solved. A lady had lost her handbag, which was almost new. There was no witness of it available and it was probable that it was not yet impregnated with her radiations. The operator asked the lady for a sketch of the bag, which was quite rough but suitable in theory because the lady was thinking of the bag as she sketched it. The operator felt nothing definite and obtained all kinds of indications on a plan of the town as to where the bag might be. Then he remembered how healers sometimes treat their patients at a distance by making magnetic passes over their photographs. So he made slow passes over the sketch several times a day for two days. The third day he made another attempt to find the bag on the plan and was successful. The pendulum indicated a shop the lady had visited but had forgotten about. The bag was handed over. The idea behind the method was that while the sketch witness was being magnetised, the bag was also being magnetised, and the link between witness and bag was thus reinforced.

p. 135. Regulating one's weight.—W. Herrinckx affirms that it is possible to reduce one's weight or put on weight without danger through treatment with Schüssler salts. The appropriate salt should be found with the pendulum and taken regularly (he suggests in the 6x potency) for three or four weeks. It may then be advisable to change to another salt. It should also be decided as to whether cooking salt should be avoided, also drinking at meal times. It is recalled that sports managers often reduce the weight of their teams by several pounds by doing no more than stopping the intake of cooking salt for several days. Water is unable to stabilise itself in the system without salt and water retains fat. In considering diet the writer makes the interesting assertion that all food which syntonises with the colour red is fattening, while that which syntonises with blue is reducing.

p. 139. Universal pendulums.—Joseph Bailly describes with the help of diagrams the basis of a universal pendulum he has designed, which is both a receptor and emitter of radiations.

p. 141. Polarity.—J. Hellebroeck begins by saying that in speaking of positive and negative polarity in bodies, these terms are conventional.

The point is that their action is opposite, the one to the other. One can find these two polarities in all bodies, he says, but they are only clearly differentiated in a bar magnet, where the flux is principally concentrated at the extremities. It is a fact, he goes on, that the negative pole emits longer radiations (presumably waves of longer wavelength) than the positive pole. Thus positive radiations are sometimes stopped by a weak dielectric such as a sheet of paper. Radiations from a negative pole, from electricity, a bar magnet, and in fact from all bodies, are beneficial for human beings, animals and plants as long as they do not get too much of them. On the other hand the radiations from the positive pole of all bodies are after a certain time destructive for living beings because of the effect they have on living cells, which are charged positively and negatively. The North Pole is negative and the South Pole positive. The positive end of a compass needle points to the north, whereas the negative end points to the south. A positive radiation which reaches us from the soil and, above all, when it rises vertically, is extremely harmful to living beings. Lightning always strikes at these points. A building, even of concrete, constructed over a positive radiation which ascends direct from the soil will show cracks after a certain time. According to different authors the right hand of a person is positive and the left hand negative, but examinations have been made with precision instruments of the radiations of the two hands of both men and women and their wavelengths have been found to be the same.

p. 143. Discerning errors.—F. Servranx suggests how, with the assistance of a diagram, we can check the solution of a radiesthetic problem to see if it is correct. The method implies mental orientation.

p. 146. Pierre Bories continues his articles on "Old Remedies."

p. 148. Colours and weather forecasting. J. Bervroux thinks that colours can be employed in forecasting the weather, and that different colours are related to the different directions of the wind and to different climatic conditions.

p. 150. For the beginner.—Suggestions are made for out-door work this summer so as to get the best results. For instance, *crêpe* rubber soles should be avoided, as should new shoes. The best time of day for radiesthetic work is round about noon, and the greatest successes may be expected between 10 a.m. and 4 p.m. It is also said that hot weather —even very hot—favours good results.—***L.R.P.T.***

p. 152. Birds on the wing.—An article on the homing instincts of birds, published by *La Dernière Heure* for April 2nd, is reproduced. It states that for some years now and more especially since 1949, when the atomic era and television came prominently into being, pigeons have become far more prone to lose their way. Moreover it has been proved officially in France that homing pigeons show greater deviations from a straight course home in dry weather, and these deviations may reach several hundred kilometres.

p. 156. This and following pages are devoted to the International Congress of All Radiesthesia, to be held in Paris on May 20th-23rd.

JUNE

p. 163. Coloured pendulums.—For the benefit of the beginner J. Bervroux outlines the advantages of coloured pendulums and how they

should be used. For preliminary experiments cork stoppers, painted with enamel paints and well dried, do quite well. A white thread should be used for all colours, even for black. What really matters is the colour of the mass of the pendulum. It is advisable later to buy a set of coloured pendulums. In use you should proceed with coloured pendulums just as you do ordinarily, using the same witnesses, etc. The only difference is that your pendulum, when properly chosen, is in resonance with the object of search. Thus reactions with coloured pendulums should be stronger and more accurate. To find the correct colour for any particular experiment, M. Bervroux suggests that you should take a white pendulum and find out by mental orientation what the colour should be. He deprecates depending on accepted codes such as that one should use red for iron, green for copper, white for silver, etc., for while these colours are in "universal accord" with the respective metals, there are others. For instance, iron is said to be in resonance with red, but also with blue. He advises that the best colour should be found mentally for each test, as the *best* colour may change both as to time and place.

p. 165. Homoeopathic remedies. W. Herrinckx lists 58 homoeopathic remedies in what he considers to be the most useful potencies for persons wishing to start taking an interest in homoeopathy.

p.167. Magnetic treatment.—"Apollonius" affirms that it is possible to give magnetic treatment to a person at a distance, provided that the intentions are good. Malevolent intentions will produce no effect. The pendulum should be consulted as to when and for how long the patient should be treated. Treatment can be carried out by simply stretching out the hands in the direction of the patient, or over his witness. It is possible also for the practitioner to treat himself, either by magnetising water and then drinking it or by magnetising a pad of cotton wool. When magnetising water you should hold the fingers of both hands several centimetres above the surface of the water, pointing them at the surface, and concentrate on the condition it is desired to cure. For magnetising wool, it is only necesary to make passes over it. Changes in vitality of the patient can be found by pendulum on a rule or protractor.

p. 171. Mental impregnations.—W. Servranx recalls that Bovis was the first to draw attention to the following phenomenon. If in thinking of a common or rare substance, you make a sketch of it with a pencil, the sketch will make an exact witness of the substance. Moreover, by placing the sketch under a glass of water, you can impregnate the water with the radiations of the substance. Or again, it has been asserted that if you place it-does-not-matter-what object under your hand and impregnate it mentally with the thoughts of something else, it will act as a witness of the object thought of. Is this just a suggestion or is there some other explanation? M. Servranx thinks there is.

p. 175. Personal characters of the great.—An anonymous reader describes how he determines the probable outcome of international conferences by assessing by pendulum the mental characteristics of those taking part, such as their sincerity, determination, drive, etc. For this purpose he uses a 100° protractor.

p. 177. This article deals with ways in which the radiesthetist can help the police.—*L.R.P.T.*

p. 179. Metal and nylon squares.—Following an article appearing in June, 1953 (see *Radio-Perception* for September, 1953, p. 152) the Italian magazine *Cespera* reports tests to show that squares of nylon can replace metal squares for augmenting radiesthetic influences. Experiments with black paper, however, have been very variable in their results, probably depending on the kind of paper employed.—F. Servranx.

p. 181. Waves of form.—In this article the use of the circle is discussed. It is said that if you hold your pendulum above the centre of a circle traced on paper (with the centre point marked, or not) you will obtain a North-South oscillation. If you place on any kind of disc or protractor a witness of an object, you will obtain the direction of that object. If you place an object near a circle, you will find the influence of the object inside the circle; the circle *accumulates* the influences. The circle is a good amplifier and can impregnate a word-witness (though a decagon is better for this). In order to impregnate a witnss the centre of the circle should be marked with a heavy point. You then place the object or a witness of it close to the circle, or inside it but near the circumference, and the bottle of powder or water to be impregnated right in the centre. The impregnation will be completed in from a few minutes to several days. The writer also says that the larger the circle, the greater its power to impregnate and that to obtain the effect of a circle of 100 cm. diameter you can use two concentric circles, one of 10 cm. and the other of 12 cm. diameter. The time of impregnation can be much shortened by using several tracings of circles placed one over the other.

p. 182. Artificial witnesses.—If you have a camera which can give a close-up focus, say of 50 cm., you can use it to make excellent witnesses. Load the camera with an ordinary film and place the object or person whose witness is required at the focal distance. The film should then be exposed in ordinary light (apparently not direct sunlight) with full aperture for about an hour. The film is then not developed, but placed immediately in a thick tube or carton, if possible in a dark-room. You will then have a perfect witness of the person or object, better in fact than an ordinary photograph.—*L.R.P.T.*

p. 183. Old remedies.—Pierre Bories continues his articles on this subject.

p. 185. The problem of sexual balance in humanity.—This is a translation from the English of an article by Bruce Copen.

p. 187. Treatment.—Eugène Engel illustrates two discs which he uses with a pendulum to decide: (1) What kind of treatment is required; (2) The best potency to adopt where homoeopathy is employed.

p. 188. An article by Pierre Bories, appearing in *Le Villefranchois* for May 8th, 1954, on "Radiesthesia and Local History," is reproduced.

JULY

p. 195. International Congress of Radiesthesia. Representatives of 17 countries attended the Congress held in Paris, May 19th-23rd, under the presidency of M. Gabriel Lesourd, and a number of photographs are reproduced of delegates addressing the Congress. As a result of the Congress a World Radiesthetic Committee is in process of formation. Switzerland has agreed in principle to organise another International Congress in two years' time.

p. 205. A " Vital Ray " emitter.—Similar in action to an apparatus of M. Rodolphe Lavinay described in *L.R.P.T.* for December, 1953, A. Peelers has invented a simple healing apparatus which can be constructed by anyone, provided he can obtain some copper wire, a small copper rod, a small corked glass tube and some acetate of uranium oxide. M. Peelers has come to the conclusion that a body in perfect health emits a radiation of 20 cm. wavelength and every kind of illness produces a change in this wavelength. If a radiation of 20 cm. wavelength from outside can be applied to any affected part in sufficient strength, it will restore that part of its normal frequency of oscillation. The method has the advantage that no diagnosis of the diseased condition is necessary. It is simply a question of restoring normal frequency of oscillation to the affected cells. Direct treatment can be employed with the patient sitting at any convenient distance from the apparatus, provided that it is a multiple of 20 cm. Alternatively a photograph can be employed for distant treatment. In one case a lady lost an eczema on her hands, which she had had over a year, after eight days' treatment.

p. 209. Decoctions.—Radiesthetic physicians, like the nature cure healers of the countryside, employ many decoctions either as ingredients in a prescription or as the principal means of cure. W. Herrinckx, the writer of this article, goes on to say that this is logical. The decoction brings with it principles naturally associated with the fresh plant, whose actions are complete. The decoction is much nearer life and Nature than the chemical remedy.

p. 211. " Intermediate magnetisation."—By this, says Appolonius, is meant the utilisation of the major terrestrial or cosmic currents in charging substances or objects destined to exert a favourable influence. Just as we can magnetise water with our own magnetism, so it is thought that terrestrial and cosmic influences can be included in this or similar methods for therapeutic purposes.

p. 215. Arranging your holidays. F. Servranx suggests that the pendulum could be used to advantage in deciding what agency to employ, what tour to take, what places to stay at, etc., when going on holiday.

p. 217. Pierre Bories continues his articles on old remedies.

p. 219. Joseph L. Bailly describes a special pendulum, consisting essentially of a " universal pendulum," which both transmits and receives radiations, to which is added a " Pa-Koua."

RIVISTA ITALIANA DI RADIESTHESIA

The *Rivista Italiana di Radiesthesia*, with the issue for January-February, begins its ninth year under the title *Cespera*, which is the name adopted years ago for the Roman Centre for the Experimental Study of the Science.

A report is given of the last annual Conference of the papers read by various research workers in the several applications of Radiesthesia. These include the orientation in space of human radiations, colour therapy, the scientific control of mummification, the function of the brain in radiesthetic prospection, and agricultural chemistry.

Dr. Vinci writes at length on the Royal Ambrosia, about which much has been written in Continental periodicals, in connection with the advantages of honey as an aliment. For the benefit of those who do

not know what bee-bread means, he describes how, if the hive be without a queen, the nurse-bees at once enlarge the cell of a young larva of the common worker-bee whose life-span would otherwise be about five weeks. The insects then secrete from their pharyngeal glands this wonder-working ambrosia and feed it to the future queen, with the well-known results.

This ambrosia has been studied and analysed by scientists, including Gino Ventura of the Cespera, and found to contain rare vitamins in notable condensation, as well as a hormone which Dr. Vinci has found by means of his colour-pendulum to act on the hypophysis, the conductor of the endocrine orchestra, in its reactions on the nervous system. He has also found that the ideal substance for dilution or attenuation of this ambrosia is honey. The two are complementary. There is no danger of this ambrosia ever being reproduced synthetically. It is too complex and would give too many headaches to the analyst.

Giuseppe Bartolozzi writes on human magnetic waves and their transmission. In this connection he has perfected an instrument which discriminates between what he regards as the two types of human ills, corresponding to two forms of radioactive maladies. One of these is characterised by deficiency in radioactive energy, and the other by exuberance of noxious radiations. Tables are given of the different ranges within which these radiations can be determined.

Ida Panciera describes some experiments which suggest that stones are not so dead as one imagines, inasmuch as many of them seem to be more or less radioactive. In one case some pebbles collected from the bed of a running stream and placed in a vase containing flowers and foliage with water which was changed daily, had the effect of keeping the flowers and leaves fresh for a very long time. Then, on the black paper covering wrapped carefully around a photographic film, a round pebble was placed and allowed to remain there for five minutes in a semi-darkened room. While the packet was being brought to the dark room it seemed extra warm to the touch. The negative showed nothing but two intersecting triangles and other small designs. The print, however, showed a dark shadow of the pebble. A similar result was got with a small branch of pine instead of the stone.

Dr. Vinci gives a further description of his luminous-pointed pendulum and of the principle upon which it is based.

An article from the Messaggero describes the unpleasant and the beneficial effects of different colour-schemes for patients in hospital. Also the remarkable effects of red on Edna Kaehel, as described in her book, " I am alive with Cancer," published in the United States.

Continental periodicals dealing with Radiesthesia are reviewed. As well as the January number of *The Pendulum* and the article from Don Castelli's book on his Fixed Pendulum and Cancerous Aurameter.

A good summary from *Radio-Perception* for December is given of the articles by Colonel Merrylees, Noel Macbeth, and V. L. Cameron and on another page there is an account of " The New De La Warr Machine " as described in recent issues of *Radio-Perception*.

Vol. 9, No. 2, March-April, 1954

The editor describes the use of a special screen he has used in experiments with the light-pointed pendulum referred to in previous issues. This tinted film screen has the effect of polarising the light from the

pendulum, and is comparable in its effects to the " spectacles " used for viewing three-dimensional films. Different authors are not agreed on the orientation of the Fundamental Ray of different metals. It is claimed that this difference is due to various causes (for example, the F.R. seems to be displaced at certain times during the day) and that the new pendulum, with the complementary screen, is able to eliminate these differences.

Experiments in Teleradiesthesia, carried out by members of the Cespera, from press reports and photos connected with a police case, are reported. The exercise in question was to discover the route by which the body of a murdered woman had been conveyed. All found that it had been brought from Capocotta to the south of Ostia, and back again to the former place. But was this done overland or by sea ? There were findings for both cases. The best result was that it was by sea, but close to the shore. This was confirmed by the reporting of a motor-boat having been seen on the date in question on this route, though the weather was exceptionally bad. Further experiment on a press photograph, went to show that this was a " prepared " one from a badly mounted print !

" The Use of Precious Stones in Medical Radiesthesia " is a long extract from Countess M. De Chrapowicki's address to the Medical Society for the Study of Radiesthesia. Particulars of the chemical composition and the effects of wearing are given in the case of Agate, Coral, Jade, Lapis-lazuli, Opal and Turquoise. Then follows a list of about twenty and their relation to the physical body. It is observed that although all gems in their natural state are pure until they are contaminated by human influences, not all possess curative properties. Transparent gems give out energy in light waves. Heat waves are projected by opaque ones, while those which are translucent give out both in equal measure.

" The Magic Pendulum " is an extract from a review of a book by an Italian police officer who began to use the pendulum in 1938 and to use it afterwards in his work. A Danish professor called on him one day to report that he had been robbed at his hotel of 100,000 lire and valuable documents. They both went to the hotel and made enquiries which were fruitless. The professor was annoyed and asked if Radiesthesia had been used. The officer said no ; that his department did not favour recourse to such means. " Then you are many years behind the times," said the professor. " With its aid, in my country, no crime goes unpunished. Now the thief stole the portfolios from the back pocket of my pants and left my pendulum below. Please get me a plan of the hotel quarters, and give me a piece of lead pencil." From this he took a piece of the graphite and glued it on to the base of the pendulum. Slowly, in his hand, the pendulum traced out on a white paper the design of a human face. The hotel chief was summoned and he at once recognised and named the thief, who was caught with the goods.

Ida Panciera writes on some experiments on " Polio," which seem to show that this disease is connected with common salt. Some of the latter when placed on the protecting black paper wrapped round a photographic plate, gave similar markings as were given by a press picture of a photograph of the Polio virus, when laid in a similar manner over another fresh plate.

Franco Calvario gives several examples of the necessity of avoiding rubber-soled boots when engaged in Radiesthetic work. There is nothing like leather for keeping us attached to Mother Earth.

"Light and Sound in Radiesthetic Therapy" is a translation by R.G. from the article by Countess De Chrapowicki in *Radio-Perception* of March, 1954.

VOL. 9, NO. 3, MAY-JUNE, 1954

The editorial is a plea for the humanising of measurements in Radiesthesia, which is the most human of all the Arts, since it puts man in the centre of his researches in which the instrument employed is man; for pendulum and rod are but auxiliaries, the principal instrument being the human organism itself.

Standard measurements of to-day are based on an arbitrary model: a fraction of the terrestrial diameter. This gives trouble in radiesthetic research when one is dealing with length and depth, and is representing mentally this unit of measurement which is not natural to man. And we know the tricks which mental prospection can play when the measures of size are not clear in the worker's mind. The ancients were ahead of us in this respect, for they used measures based on that of the human body: the foot, cubit, step, arm, palm, and so on. Detailed references are given to the units used by the Chinese, Egyptians, Greeks and others, and it is pointed out that some modern workers make use of the extended middle digit of the hand as unit, which has a fixed relationship to the human height. If the suggestion of the writer is approved, further directions are given for proceeding with prospection in Radiesthesia.

Ugo Gentilucci, in a note on Medical Radiesthesia, refers to Press and Radio reports of a man who suffered from acute arthritis and who was cured after carrying for some time in his pocket a flat piece of copper and another of zinc. This, it is pointed out, calls to mind the influence on cellular oscillation of Lakhovski's oscillating circuits, which the writer has used with success. Lakhovski's theory is summarised. It would seem, from an experience recorded by the writer, that such beneficial action is not confined to that of metals; for he was able to keep clear of colds and influenza from November to March by keeping a little collection of horse-chestnuts under his pillow. As for uric acid troubles, either garlic or the nettle is better than most of the remedies nowadays prescribed.

A long report is given of a recent conference of the Italian Centre of Phyto-therapy. The subject discussed was the Radioactivity of Plants in connection with the prevention and cure of disease. This action can sometimes take place at a distance, as in the case of patients in a pine forest or even in the hayfield. The first portion of the report is shortened, and the reader who is interested in the mitogenetic radiations from living material is referred to special works on the subject. The main body of the article deals with the chief properties of about twenty common plants, well known to the ancients and to modern herbalists. These include Buckthorn, Squill, Mandrake, Oenothera, Avens, Shepherd's Purse, Greater Celandine, Potentilla, Iris, Peony, Betony, Cyclamen, Ivy and Nettle. Some others are hard to identify from their local names in the absence of the scientific name. It is pointed out that the therapeutic action of these remedies (especially

when potentised) goes far beyond the action of their chemical constituents, as radiesthetists well know.

It is pointed out that the reduction in bulk of recent numbers of the *Rivista* is due to the fact that it is now issued directly by the Cespera, the Italian Experimental Centre for Radiesthesia, and this necessitates condensation of matter which is not directly connected with the Centre. Since this change was effected, the membership of the Cespera has notably increased. One of the collaborators has initiated the Archives of Radiesthesia, by presenting to the headquarters of the Centre a copy of each of his own works. He is Signor Amato Marcoccio, and he will be in charge of the Archives. For some time past he has been concerned about the situation of many research workers who await verification by others of what they have discovered. There is now a Register into which will be entered chronologically the subject of such experiments, the author's name and so on; and he will be duly notified if and when his findings are confirmed by others. Should this not be the case, secrecy will be observed. Instructions are given as to procedure for those members of the Cespera who wish to avail of the Archives. B.C.

ZEITSCHRIFT FUR RADIÄSTHESIE

VI, 2-3. March-June, 1954

Dr. Wetzel again appeals in an editorial for the support of all members of his society against an onslaught that has recently been made upon instruments devised for protection from harmful rays. This onslaught has been made by a Dr. Prokop in a Press conference at Bonn, on behalf of the "German Society for Protection from Superstition," and seems to have enlisted the support of one of the members of the *Verband für Ruten- u. Pendelkunde*. The member in question has been excluded under the rules of the Society.

Dr. Wetzel has also to report, alas, the loss by death of one of the most prominent members of the *Verband*, the late Hans Dannert, well known to many of the members of our Society as the co-inventor with Dr. Henrichs of the "Phylax" instrument. He had spent much energy and money in the endeavour to devise objective physical instruments for radiesthetic research, among which he envisaged a physical instrument which would largely replace the dowser.

Dr. Hermanns, who has been making observations among the Bhils of Central India, gives an account of various methods used by Indians in water divining. The water diviners come from all classes from Brahmans to aboriginals, and among them he found some who undoubtedly had ability. He thinks, however, that those whom he found capable were too uncertain in their prognostications for their results to be of much value, while many others relied on purely magical methods which only gave results by accident.

When his own ability as a dowser had been recognized he was asked by the Government to locate wells in jungle tracts. His ability with the pendulum was much sought by the missionary hospitals and recognized by the tribal magicians. This recognition greatly helped his work on the tribal myths of the Bhils.

Under the title of "The bioclimatic riddle of Serfaus in Tyrol," Dr. Hradil writes briefly of a district in the highest part of the Inn valley close to where the river crosses to border. Here, at a height of

about 4,700 feet grow crops which are only normally found below 2,600 feet. He suggests the possible existence of special rays which may favour the growth of such crops.

Dr. Franz Wetzel writes of two instances of doctors' houses where he has found indications that sickness has been caused by harmful rays. He also gives four instances in which by means of instruments :—

(*a*) A thoroughly damp house was dried out ;
(*b*) Sleeplessness in a hospital was alleviated ;
(*c*) A skin eruption was cured ;
(*d*) Bronchial asthma, bladder pain and skin eruptions were removed.

Angelika Kuhn, of Vienna, describes an interesting method devised by another Austrian to illustrate photographically the motions of the divining rod in the hands of the dowser. This is done by attaching a light to the end of the rod. The resulting negative shows the oscillations produced in passing over a zone of influence. Two plates are shown.

Group reports from various quarters show the very lively interest of members of the *Verband* and others in their subject. A two-day course of instruction was held at Nuremberg in March at which 25 members attended. This course will be of particular interest to our members, as Madame Maury accepted the invitation of the *Verband* to act as Director.

Other lantern lectures and conferences were held in other great towns, and the reports show that they were well attended.

A special reprint is given of a 16-page article by Dr. Wüst, who reviews the present position of " Physical proofs of the so-called ' Earth-rays.' "

He thinks that these proofs have provided something tangible with which to refute opinionated opposition, while they encourage also the dowser to improve his own skill, and to try to find an objective physical explanation for his failures. He deals with both electric, magnetic and acoustic phenomena, and gives a bibliography at the end.

He has in many cases found a connection between marked changes in magnetic field strength and the dowsing reaction ; but he gives the warning that he has also found dowsing reactions with no change in magnetic field strength, and marked change in field strength without dowsing reactions. Although he does not know the reasons for these discrepancies he thinks they may be caused by differences in depth of the disturbing influence.

He has found it particularly difficult in his investigations to correlate the dowsing reaction with the reception of short waves particularly in the open, " where there are reflections of ultra short waves from houses, hedges, pylons, trees, even from moving cars and persons, which cause constantly changing interference ; making it difficult, even if not impossible, to correlate the variation of reception with a zone of influence."

He concludes from his examination of the known data that " in places where the dowser reacts there can be detected by various physical methods changes in the magnetic, electric, acoustic states of the earth, as also in the electric field of the air, and in radioactivity. Only in the last named case can we actually talk of radiation. Particularly it seems from Cody's results to play a part in the development of Cancer."

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The widow of a former member wishes to dispose of a Mansfield Water Finder, the original cost of which was about £60. Inquiries should be sent to Mrs. Hunter, Marionslea, Rothesay, Isle of Bute.

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Dr. W. E. Benham has for disposal one single-layer Cosmic-ray Therapy Unit (similar to Reich Orgone Accumulator). Ht. 3ft. 6in., depth 2ft. 6in., width 2ft. 6in., hinged door with hinged observation flap. Effective and completely safe. £25 or near offer for quick sale. Holt's Crest, Fordcombe, nr. Tunbridge Wells.

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The *Aura Biometer*, complete with probe, pendulum, handbook and other accessories is available at five guineas, postage in U.K. 7/6. The above has been designed and produced in conjunction with W. E. Benham, D.Sc., F.Inst.P. The Biometer Pendulum can be obtained separately at 5/-, post 3d.

Kilner Goggles, 30/-, post 6d. A wide range of optical filters for colour therapy and aura research is available ; lists on request.

Borderline Series research publications include : the *Handbook of the Aura Biometer* (5/-) ; *Seeing the Aura*, Caxton Hall lecture report (3/6) ; *Biometric Analysis of the Flying Saucer Photographs*, including readings of metals as control samples (5/-). Postage 3d. each.

All the above are available from, J. J. Williamson, F.S.M., Assoc.Brit.I.R.E., Archers' Court Research Group, Hastings, Sussex.

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Elementary Radiesthesia by the late F. A. Archdale is on sale, 4/3 post free. This work, together with the Beechwood Pendulums at 3/6, the Conical Universal Pendulum at 12/6 and the *Pendulum*, the Monthly Review of Radiesthesia—Subscription rate 25/- at home, 26/- abroad and $3.80 in North America—is obtainable either from us or from Mrs. M. Archdale, 3 Wayside Road, Southbourne, Bournemouth. Sample copy of the *Pendulum* 2/3.

Copies of *Dowsing* by Pierre Béasse are available at 13/- ($2), the Schumfell radio-magnetic pendulum mentioned in the book at £5 ($15) and the descriptive handbook at 6d.—all the above post free.

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The " Link " divining rod described by Mr. Guy Underwood in his article on Spirals and Stonehenge (*B.S.D.J.* 62, Dec., 1948) can be obtained from him at Belcombe House, Bradford-on-Avon, Wilts., price 8/- post free in U.K. Reprints of this article are available at 2/- each. Reprints of 10 Essays on water-divining and archaeology, 15/- the set.

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